

Welcome to STN International! Enter x:x

LOGINID:ssspta1204jxv

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPlus records now contain indexing from 1907 to the present
NEWS	4	DEC 08	INPADOC: Legal Status data reloaded
NEWS	5	SEP 29	DISSABS now available on STN
NEWS	6	OCT 10	PCTFULL: Two new display fields added
NEWS	7	OCT 21	BIOSIS file reloaded and enhanced
NEWS	8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS	9	NOV 24	MSDS-CCOHS file reloaded
NEWS	10	DEC 08	CABA reloaded with left truncation
NEWS	11	DEC 08	IMS file names changed
NEWS	12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS	13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAPlus
NEWS	14	DEC 17	DGENE: Two new display fields added
NEWS	15	DEC 18	BIOTECHNO no longer updated
NEWS	16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS	17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS	18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS	19	DEC 22	ABI-INFORM now available on STN
NEWS	20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS	21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAPlus
NEWS	22	FEB 05	German (DE) application and patent publication number format changes
NEWS EXPRESS			DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:11:35 ON 11 FEB 2004

=> file stnguide
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.42	0.42

FILE 'STNGUIDE' ENTERED AT 14:12:55 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 6, 2004 (20040206/UP).

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):

Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.66	1.08

FILE 'REGISTRY' ENTERED AT 14:19:23 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 10 FEB 2004 HIGHEST RN 648858-13-3
DICTIONARY FILE UPDATES: 10 FEB 2004 HIGHEST RN 648858-13-3

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading 10055664.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 14:20:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1354 TO ITERATE

73.9% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

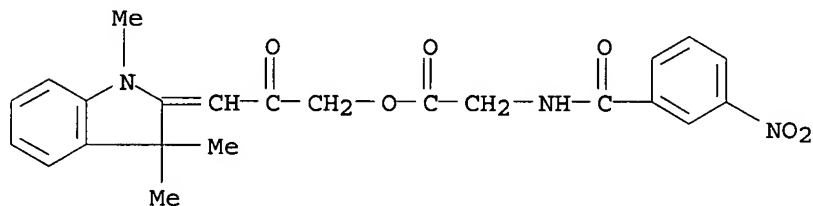
50 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 24873 TO 29287
PROJECTED ANSWERS: 6464 TO 8808

L2 50 SEA SSS SAM L1

=> d scan

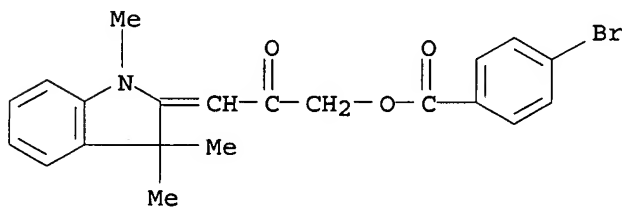
L2 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Glycine, N-(3-nitrobenzoyl)-, 3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-2-oxopropyl ester (9CI)
MF C23 H23 N3 O6



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

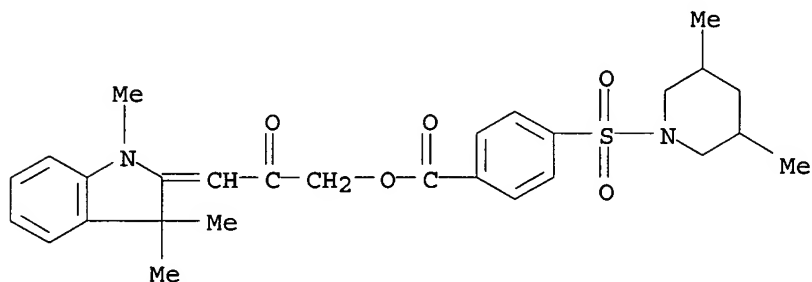
L2 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzoic acid, 4-bromo-, 3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-2-oxopropyl ester (9CI)
MF C21 H20 Br N O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

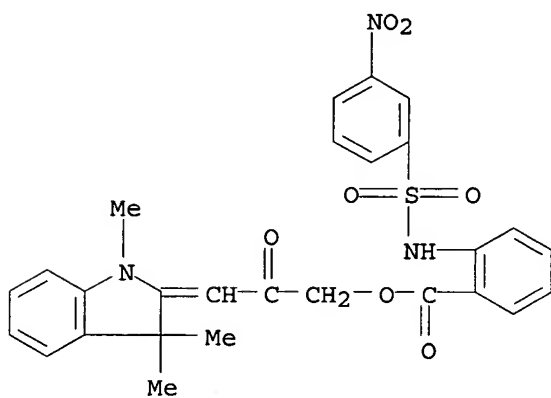
L2 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Benzoic acid, 4-[(3,5-dimethyl-1-piperidiny1)sulfonyl]-,
3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-2-oxopropyl ester (9CI)
MF C28 H34 N2 O5 S



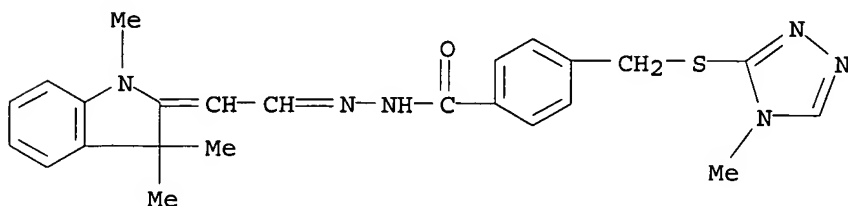
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzoic acid, 2-[[[(3-nitrophenyl)sulfonyl]amino]-, 3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-2-oxopropyl ester (9CI)
MF C27 H25 N3 O7 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzoic acid, 4-[[[(4-methyl-4H-1,2,4-triazol-3-yl)thio]methyl]-, [(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]hydrazide (9CI)
MF C24 H26 N6 O S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

Uploading 10055664.str

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l3

SAMPLE SEARCH INITIATED 14:26:57 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 87 TO ITERATE

100.0% PROCESSED 87 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1181 TO 2299

PROJECTED ANSWERS: 1 TO 80

L4 1 SEA SSS SAM L3

=> s l3 full

FULL SEARCH INITIATED 14:27:02 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1340 TO ITERATE

100.0% PROCESSED 1340 ITERATIONS

19 ANSWERS

SEARCH TIME: 00.00.01

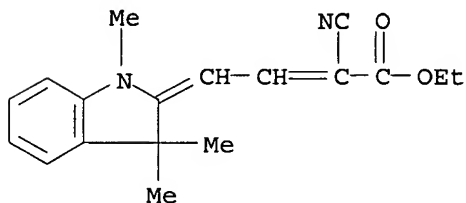
L5 19 SEA SSS FUL L3

=> d scan

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI)

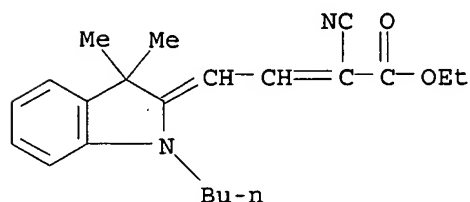
MF C18 H20 N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

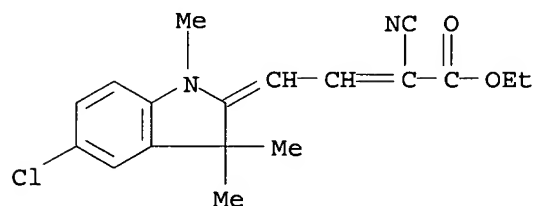
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 4-(1-butyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-2-cyano-, ethyl ester (9CI)
MF C21 H26 N2 O2



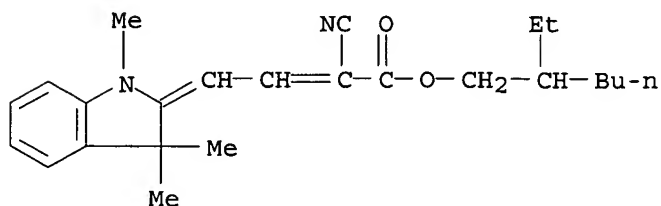
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN .DELTA.2,.gamma.-Indolinecrotonic acid, 5-chloro-.alpha.-cyano-1,3,3-trimethyl-, ethyl ester (7CI)
MF C18 H19 Cl N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

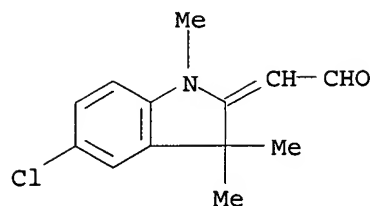
L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, 2-ethylhexyl ester (9CI)
MF C24 H32 N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

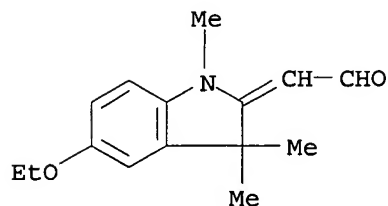
L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-

(9CI)
MF C13 H14 Cl N O



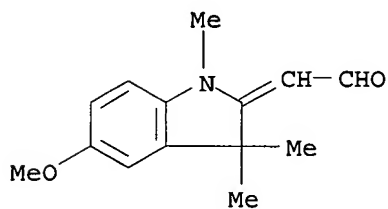
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Acetaldehyde, (5-ethoxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI)
MF C15 H19 N O2



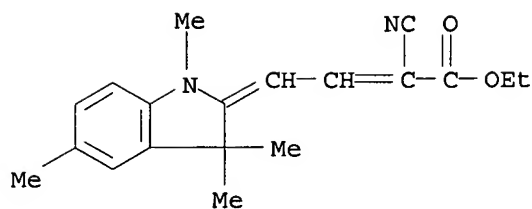
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI)
MF C14 H17 N O2



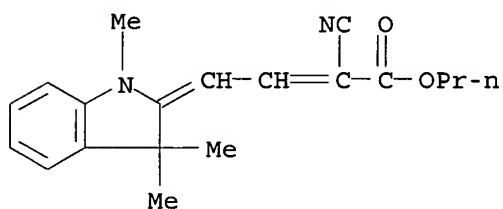
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3,5-tetramethyl-
, ethyl ester (7CI)
MF C19 H22 N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

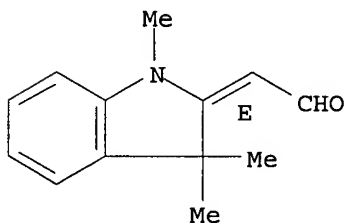
L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, propyl ester (9CI)
 MF C19 H22 N2 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, (E)- (9CI)
 MF C13 H15 N O

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

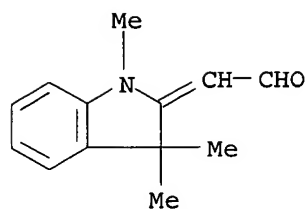
L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, methyl ester (9CI)
 MF C17 H18 N2 O2



L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Acetaldehyde, [5-(1,1-dimethylethyl)-1,3-dihydro-1,3,3-trimethyl-2H-indol-
2-ylidene]- (9CI)
MF C17 H23 N O

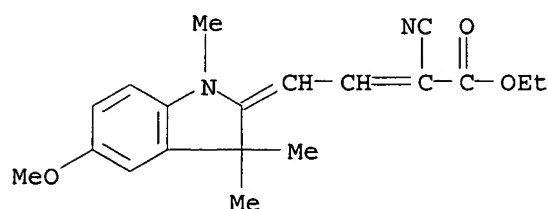
CC1(C)C(=C(C=O)O)N(C)C1c2ccccc2

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI)
MF C13 H15 N O



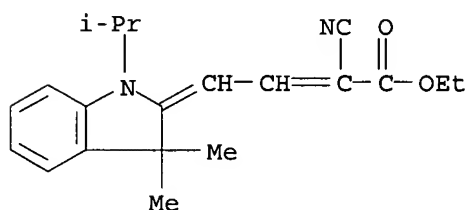
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-5-methoxy-1,3,3-trimethyl-, ethyl ester (7CI)
 MF C19 H22 N2 O3



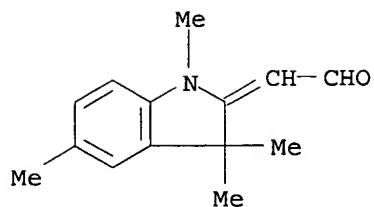
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN 2-Butenoic acid, 2-cyano-4-[1,3-dihydro-3,3-dimethyl-1-(1-methylethyl)-2H-indol-2-ylidene]-, ethyl ester (9CI)
 MF C20 H24 N2 O2



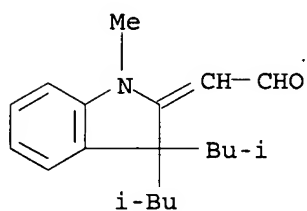
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)- (9CI)
 MF C14 H17 N O



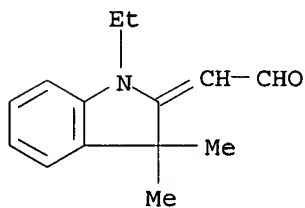
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN Acetaldehyde, [1,3-dihydro-1-methyl-3,3-bis(2-methylpropyl)-2H-indol-2-ylidene] - (9CI)
 MF C19 H27 N O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 19 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene) - (9CI)
 MF C14 H17 N O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
160.88	161.96

FILE 'CAPLUS' ENTERED AT 14:27:39 ON 11 FEB 2004
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FILE COVERS 1907 - 11 Feb 2004 VOL 140 ISS 7
FILE LAST UPDATED: 10 Feb 2004 (20040210/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 15
L6 235 L5

=> file reg	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.88	162.84

FILE 'REGISTRY' ENTERED AT 14:28:57 ON 11 FEB 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 FEB 2004 HIGHEST RN 648858-13-3
DICTIONARY FILE UPDATES: 10 FEB 2004 HIGHEST RN 648858-13-3

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

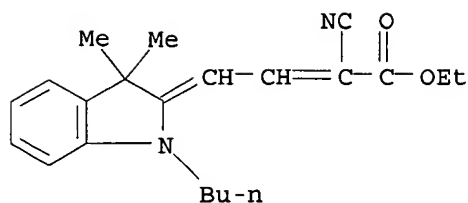
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d 15 1-19

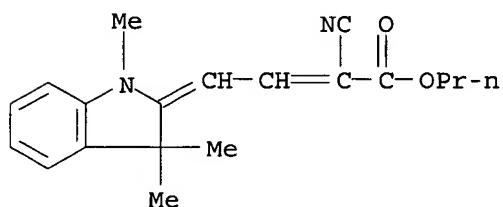
L5 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 582333-31-1 REGISTRY
CN 2-Butenoic acid, 4-(1-butyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-2-cyano-, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H26 N2 O2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

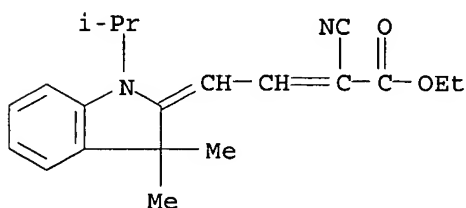
L5 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 467465-02-7 REGISTRY
CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, propyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H22 N2 O2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

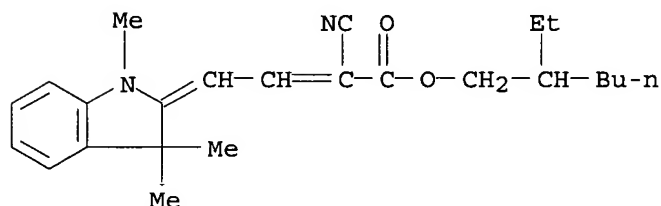
L5 ANSWER 3 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 330799-42-3 REGISTRY
CN 2-Butenoic acid, 2-cyano-4-[1,3-dihydro-3,3-dimethyl-1-(1-methylethyl)-2H-indol-2-ylidene]-, ethyl ester (9CI) (CA INDEX NAME)
MF C20 H24 N2 O2
SR CA
LC STN Files: CA, CAPLUS, CASREACT



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

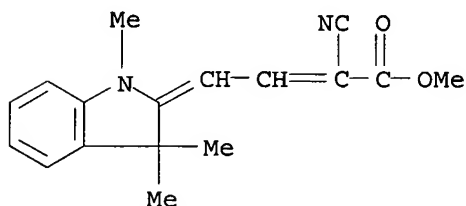
L5 ANSWER 4 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 263277-40-3 REGISTRY
 CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, 2-ethylhexyl ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C24 H32 N2 O2
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

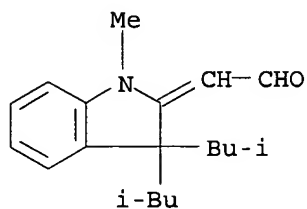
L5 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 157912-62-4 REGISTRY
 CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, methyl ester (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C17 H18 N2 O2
 SR CA
 LC STN Files: CA, CAPLUS, CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

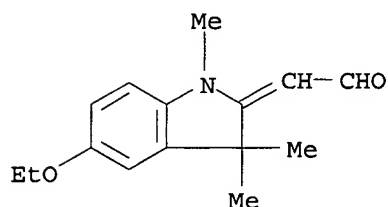
L5 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 119648-62-3 REGISTRY
 CN Acetaldehyde, [1,3-dihydro-1-methyl-3,3-bis(2-methylpropyl)-2H-indol-2-ylidene]- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 3,3-Diisobutyl-2-(formylmethylene)-1-methylindole
 FS 3D CONCORD
 MF C19 H27 N O
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

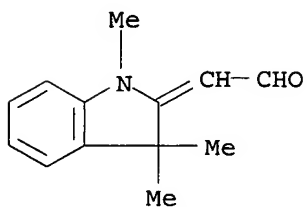
L5 ANSWER 7 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 111281-51-7 REGISTRY
CN Acetaldehyde, (5-ethoxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) -
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H19 N O2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 8 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 109020-14-6 REGISTRY
CN Indolinesulfonic acid, 2-(formylmethylene)-1,3,3-trimethyl- (6CI) (CA
INDEX NAME)
MF C13 H15 N O4 S
CI IDS
SR CAOLD
LC STN Files: CA, CAOLD, CAPLUS

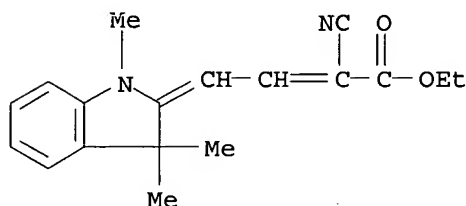


D1-SO₃H

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

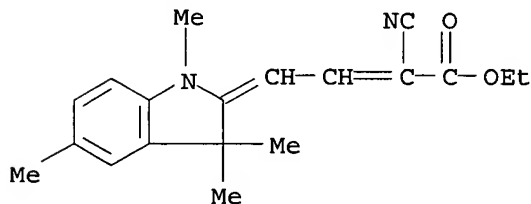
L5 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 96000-62-3 REGISTRY
CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3-trimethyl-, ethyl ester (7CI)
FS 3D CONCORD
MF C18 H20 N2 O2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

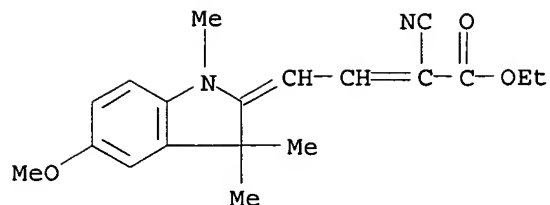
L5 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 95316-60-2 REGISTRY
CN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3,5-tetramethyl-, ethyl ester (7CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H22 N2 O2
LC STN Files: CA, CAOLD, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

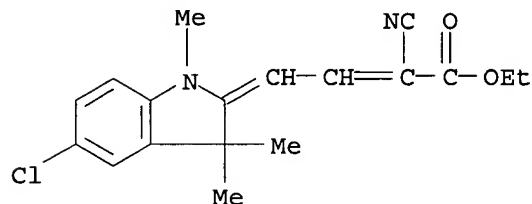
L5 ANSWER 11 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 95277-55-7 REGISTRY
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FS 3D CONCORD
MF C19 H22 N2 O3
LC STN Files: CA, CAOLD, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 12 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 95125-53-4 REGISTRY
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 FS 3D CONCORD
 MF C18 H19 Cl N2 O2
 LC STN Files: CA, CAOLD, CAPLUS

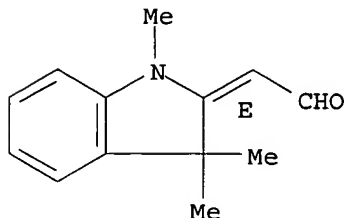


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 13 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 85654-15-5 REGISTRY
 CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, (E)-(9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C13 H15 N O
 LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX
 (*File contains numerically searchable property data)

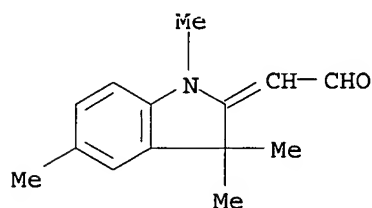
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

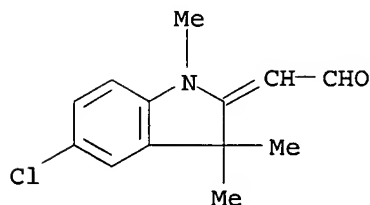
L5 ANSWER 14 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 59737-30-3 REGISTRY
CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C14 H17 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

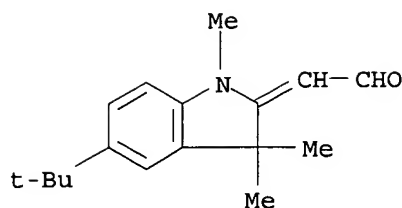
L5 ANSWER 15 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 59737-29-0 REGISTRY
CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H14 Cl N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

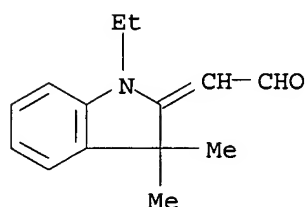
L5 ANSWER 16 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 42219-83-0 REGISTRY
CN Acetaldehyde, [5-(1,1-dimethylethyl)-1,3-dihydro-1,3,3-trimethyl-2H-indol-
2-ylidene]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H23 N O
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

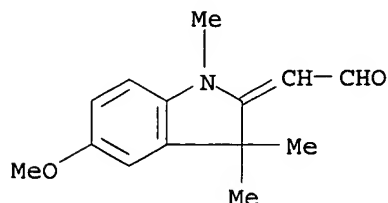
L5 ANSWER 17 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 41568-14-3 REGISTRY
CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C14 H17 N O
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

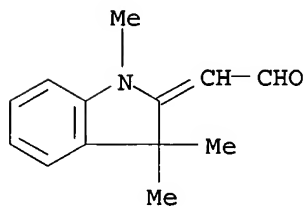
L5 ANSWER 18 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 6872-08-8 REGISTRY
CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN .DELTA.2,.alpha.-Indolineacetaldehyde, 5-methoxy-1,3,3-trimethyl- (8CI)
FS 3D CONCORD
MF C14 H17 N O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 19 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
RN 84-83-3 REGISTRY
CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN .DELTA.2,.alpha.-Indolinacetaldehyde, 1,3,3-trimethyl- (6CI)
CN .DELTA.2,.alpha.-Indolineacetaldehyde, 1,3,3-trimethyl- (7CI, 8CI)
OTHER NAMES:
CN (1,3,3-Trimethylindolin-2-ylidene)acetaldehyde
CN 1,3,3-Trimethyl-.DELTA.2,.alpha.-indolineacetaldehyde
CN 1,3,3-Trimethyl-2-(formylmethylene)-2,3-dihydroindole
CN 1,3,3-Trimethyl-2-(formylmethylene)indoline
CN 1,3,3-Trimethyl-2-methyleneindoline-.omega.-aldehyde
CN 2-(Formylmethylene)-1,3,3-trimethylindoline
CN 2-(Formylmethylene)-2,3-dihydro-1,3,3-trimethylindole
CN Fischer's aldehyde
CN NSC 68048
FS 3D CONCORD
MF C13 H15 N O
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(*Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

222 REFERENCES IN FILE CA (1907 TO DATE)
222 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 15 not 84-83-3
1 84-83-3
(84-83-3/RN)
L7 18 L5 NOT 84-83-3

=> file caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
34.47	197.31

FILE 'CAPLUS' ENTERED AT 14:30:14 ON 11 FEB 2004
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FILE COVERS 1907 - 11 Feb 2004 VOL 140 ISS 7
FILE LAST UPDATED: 10 Feb 2004 (20040210/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17

L8 27 L7

=> d ibib abs hitstr 1-27

L8 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:653180 CAPLUS

DOCUMENT NUMBER: 139:198798

TITLE: Merocyanine dye and initiator system for photopolymerizable materials

INVENTOR(S): Ernst, Steffen; Reiner, Knut; Mustroph, Heinz

PATENT ASSIGNEE(S): Few Chemicals Chemiepark Bitterfeld Wolfen, Germany

SOURCE: Ger. Offen., 18 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10203939	A1	20030821	DE 2002-10203939	20020201
PRIORITY APPLN. INFO.:			DE 2002-10203939	20020201
OTHER SOURCE(S):	MARPAT	139:198798		

AB Merocyanine dyes are disclosed which can be used as photosensitizers in UV- and blue-light-sensitive initiator systems for polymn. and crosslinking. The dyes are suitable for the computer-to-plate process in prodn. of printing plates and provide sensitivity to a narrow wavelength range, thereby decreasing sensitivity to daylight exposure. An example was given in which malonodinitrile was condensed with tri-Et orthoformate and Fischer's base to give a dye sensitizer. Compns. contg. Et acrylate-methacrylic acid-Me methacrylate copolymer could be crosslinked with triethylene glycol dimethacrylate using such a dye.

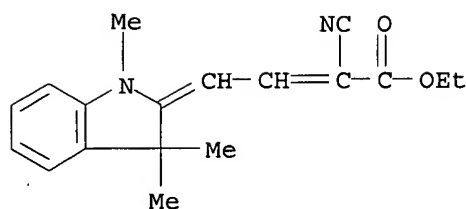
IT 96000-62-3 582333-31-1

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

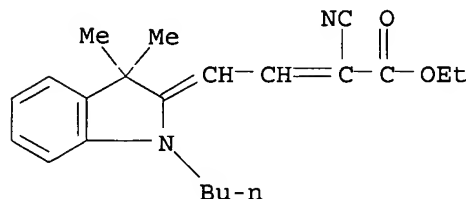
(dye; merocyanine dyes for use as photosensitizers in printing plate prodn.)

RN 96000-62-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



RN 582333-31-1 CAPLUS
 CN 2-Butenoic acid, 4-(1-butyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-2-cyano-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:778306 CAPLUS

DOCUMENT NUMBER: 137:302307

TITLE: Optical data carrier containing merocyanine dye as the light-absorbing compound in the information layer and the dyes

INVENTOR(S): Berneth, Horst; Bruder, Friedrich-Karl; Haese, Wilfried; Hagen, Rainer; Hassenrueck, Karin; Kostromine, Serguei; Landenberger, Peter; Oser, Rafael; Sommermann, Thomas; Stawitz, Josef-Walter; Bieringer, Thomas

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 183 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 15

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002080161	A2	20021010	WO 2002-EP3068	20020320
WO 2002080161	A3	20021219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10115227	A1	20021219	DE 2001-10115227	20010328
DE 10117464	A1	20021010	DE 2001-10117464	20010406
US 2002155381	A1	20021024	US 2002-102586	20020320
WO 2002086878	A2	20021031	WO 2002-EP3071	20020320
WO 2002086878	A3	20030227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003003396 A1 20030102 US 2002-102571 20020320

EP 1377975 A2 20040107 EP 2002-727443 20020320

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

EP 1377976 A2 20040107 EP 2002-730031 20020320

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

EP 1377978 A2 20040107 EP 2002-737887 20020320

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

DE 2001-10115227 A 20010328
DE 2001-10117464 A 20010406
DE 2001-10117461 A 20010406
DE 2001-10117462 A 20010406
DE 2001-10117463 A 20010406
DE 2001-10124585 A 20010521
DE 2001-10136063 A 20010725
DE 2001-10136064 A 20010725
DE 2001-10140165 A 20010822
EP 2001-123810 A 20011004
EP 2001-130527 A 20011221
DE 2002-10200484 A 20020109
DE 2002-10202571 A 20020124
EP 2002-5505 A 20020311
WO 2002-EP3068 W 20020320
WO 2002-EP3071 W 20020320
WO 2002-EP3094 W 20020320

OTHER SOURCE(S): MARPAT 137:302307

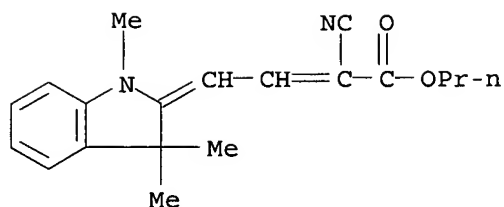
AB The invention relates to an optical data carrier that contains a preferably transparent substrate that is optionally already coated with one or more reflective layers, onto whose surface an information layer which can be written on with light, optionally one or more reflective layers and optionally a protective layer or a further substrate or a cover layer are applied. The optical data carrier can be written on and read with blue, red or IR light, preferably laser light. The information layer contains at least one merocyanine dye as the light-absorbing compd., and optionally a binder. The merocyanine dyes and the use of dyes with absorption max. of 340-410, 420-650, or 650-810 nm are also claimed.

IT 467465-02-7P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(merocyanine dyes for light absorbers for information layer of optical disks)

RN 467465-02-7 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, propyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:30191 CAPLUS

DOCUMENT NUMBER: 134:253720

TITLE: Molecular design of thermally stable glass-forming merocyanine dyes

AUTHOR(S): Wurthner, F.; Yao, Sheng; Wortmann, R.

CORPORATE SOURCE: Abteilung Organische Chemie II, Universitat Ulm, Ulm, D-89081, Germany

SOURCE: Journal of Information Recording (2000), 25(1-2), 69-86

CODEN: JIREFL; ISSN: 1025-6008

PUBLISHER: Gordon & Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:253720

AB A series of merocyanine dyes for nonlinear optical and photorefractive applications based on the same acceptor unit, 1-butyl-2,6-dioxo-1,2,5,6-tetrahydropyridine-3-carbonitrile-5-ylidene, and donor groups of different electron-donating strength were studied by DSC and TGA. For this series of dyes the thermal stability was found to correlate with the strength of the electron donor group. The highest stability was obsd. for dyes with strong donor groups and an electronic system close to the charge resonance limit where all bonds of the donor- π -acceptor system exhibit a formal bond order of one and a half. A remarkable capability for the formation of amorphous glasses upon cooling from the melt or soln. casting was obsd. for several merocyanine dyes which contain the strong 1-alkyl-3,3-dimethylindoline-2-ylidene electron donor unit. Through substituent variations at the electron donor and acceptor groups some relationships could be revealed between mol. structure and morphol. properties of the solid state.

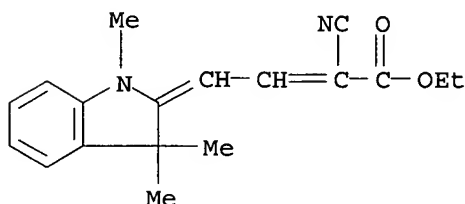
IT 96000-62-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(dye; thermally stable glass-forming merocyanine dyes)

RN 96000-62-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



IT 330799-42-3P

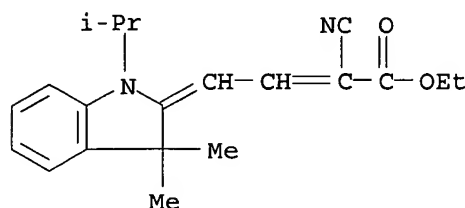
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(yellow dye; prepn. of thermally stable glass-forming merocyanine dyes)

RN 330799-42-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-[1,3-dihydro-3,3-dimethyl-1-(1-methylethyl)-2H-

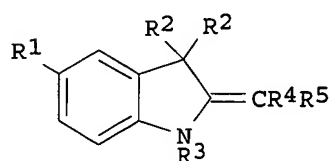
indol-2-ylidene]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2000:241181 CAPLUS
 DOCUMENT NUMBER: 132:269851
 TITLE: Indoline derivatives as sun protection agents
 INVENTOR(S): Zink, Rudolf; Luther, Helmut
 PATENT ASSIGNEE(S): CIBA Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000020388	A1	20000413	WO 1999-EP6984	19990921
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9959803	A1	20000426	AU 1999-59803	19990921
BR 9914255	A	20010703	BR 1999-14255	19990921
EP 1117641	A1	20010725	EP 1999-970081	19990921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002526526	T2	20020820	JP 2000-574505	19990921
US 6358496	B1	20020319	US 2001-806349	20010329
US 2002103197	A1	20020801	US 2002-55664	20020123
PRIORITY APPLN. INFO.:			EP 1998-810993	A 19981002
			WO 1999-EP6984	W 19990921
			US 2001-806349	A3 20010329
OTHER SOURCE(S):		MARPAT 132:269851		
GI				



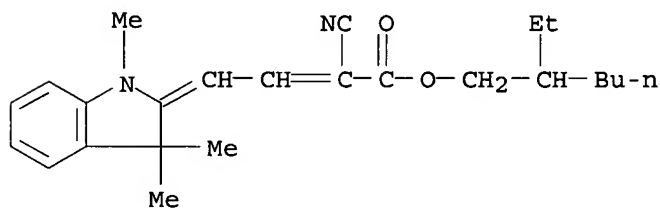
I

AB Indoline derivs. [I; R1 = H, C1-5 alkyl, C1-18 alkoxy, halo; R2 = C1-8 alkyl, C5-7 cycloalkyl, C6-10 aryl; R3 = C1-18 alkyl, substituted 1,3,5-triazinyl; R4 = H, C(O)R6; R5 = C1-18 alkoxy, (NR7)nC(O)R8, CH:C(CN)CO2R9; R6, R7 = H, C1-5 alkyl; R8 = H, C1-5 alkyl, C5-7 cycloalkyl, Ph, phenylalkyl; R9 = C1-18 alkyl; n = 0, 1] are prepd. by condensation of the corresponding Fischer base with an acid chloride or CH acid for use as sun protection agents. Thus, 2-(1,3,3-trimethylindolin-2-ylene)acetaldehyde was condensed with 2-ethylhexyl cyanoacetate in PhMe at 100-110.degree. in the presence of AcOH and piperidine to form I [R1, R4 = H, R2 = R3 = Me, R5 = CH:C(CN)CO2CH2CH2EtBu] (II). A water-in-oil sunscreen emulsion contained PEG-30 dipolyhydroxystearate 3.50, PEG-22/dodecyl glycol copolymer 1.50, microcryst. wax 1.00, hydrogenated castor oil 1.00, Mg stearate 1.00, octyl stearate 15.00, coco glycerides 2.00, mineral oil 3.00, phenoxyethanols and parabens 1.00, octyl methoxycinnamate 5.00, dimethicone 0.10, deionized H2O 49.90, allantoin 0.10, MgSO4 1.00, II 5.00, propylene glycol 4.00, and methylenebis(benzotriazolyl)tetramethylbutylphenol 6.00 wt.% (pH 5.5).

IT 263277-40-3P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (indoline derivs. as sun protection agents)

RN 263277-40-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, 2-ethylhexyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:591470 CAPLUS

DOCUMENT NUMBER: 121:191470

TITLE: Short wavelength laser-sensitive high-density optical recording medium

INVENTOR(S): Ishioka, Takayuki; Oonishi, Atsushi

PATENT ASSIGNEE(S): Nippon Columbia, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

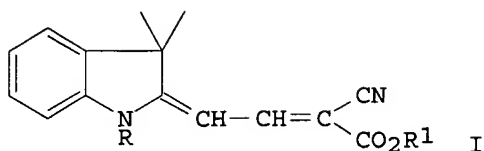
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05305773	A2	19931119	JP 1992-137907	19920430
JP 3172260	B2	20010604		

PRIORITY APPLN. INFO.: JP 1992-137907 19920430

GI

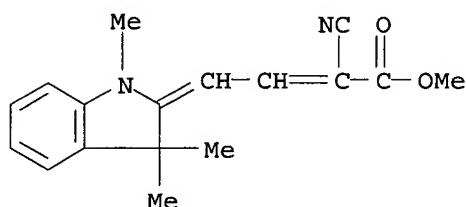


AB In the title recording medium having on its transparent substrate a recording layer and then a reflective layer, the recording layer employs a styryl org. dye I (R, R' = Me, Et).

IT 157912-62-4
RL: USES (Uses)
(recording layer using, for optical recording material)

RN 157912-62-4 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, methyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:255031 CAPLUS

DOCUMENT NUMBER: 118:255031

TITLE: Intramolecular interactions in phosphorus-substituted 1,3,3-trimethyl-2-methyleneindolines

AUTHOR(S): Ratovskii, G. V.; Belaya, S. L.; Tolmachev, A. A.; Kostyuk, A. N.

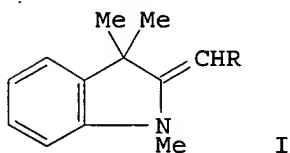
CORPORATE SOURCE: Irkutsk. Gos. Univ., Russia

SOURCE: Zhurnal Obshchei Khimii (1992), 62(9), 2046-51
CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

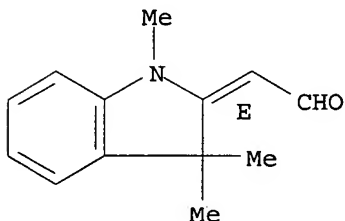
GI



AB Intramol. interactions of 21 title compds. I [R = H, PX₂, P(O)X₂, P(S)X₂, P(NPh)(OMe)₂, P+Cl(NEt₂)₂ Cl⁻, COH, Ac, Bz, CN; X = NEt₂, OEt, Ph, Cl, Br] were examd. by IR and UV spectroscopic methods. Donor-acceptor interactions of P-contg. groups with the unsatd. moiety were examd. The .pi.-acceptor effect of PX₂ and P(Y)X₂ groups when X is varied increases in the order NAlk₂ .apprxeq. OAlk < Ph .mchlt. Cl < Br. The .pi.-acceptor effect of P(O)X₂ groups is weaker than that of PX₂, which is caused by competing transfer of electron d. from the phosphoryl oxygen to the PX₂ moiety.

IT 85654-15-5
 RL: PRP (Properties)
 (IR and UV spectra of)
 RN 85654-15-5 CAPLUS
 CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, (E)-
 (9CI) (CA INDEX NAME)

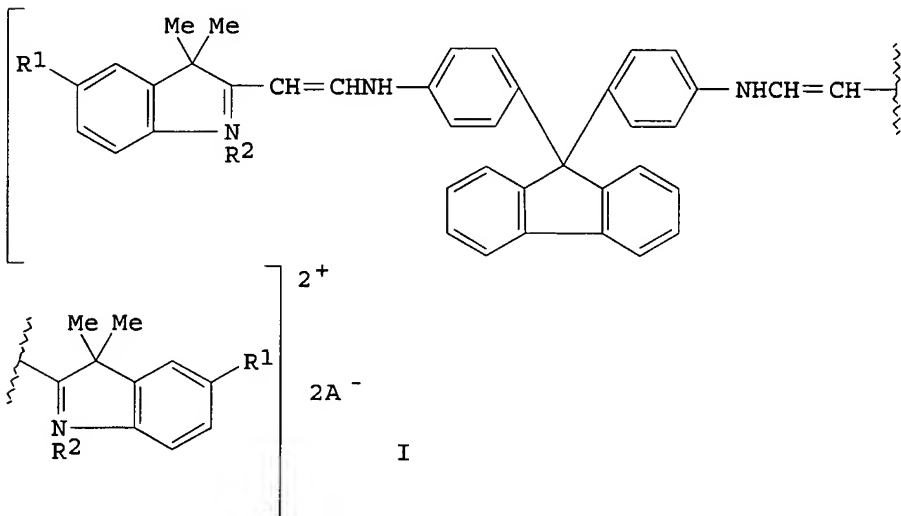
Double bond geometry as shown.



L8 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:610209 CAPLUS
 DOCUMENT NUMBER: 115:210209
 TITLE: Yellow cationic dyes and their use
 INVENTOR(S): Imakomi, Hiroshi; Kondo, Masayoshi; Nakajo, Teruo
 PATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03134063	A2	19910607	JP 1989-271484	19891020
JP 2741782	B2	19980422		

PRIORITY APPLN. INFO.: JP 1989-271484 19891020
 OTHER SOURCE(S): MARPAT 115:210209
 GI



AB The dyes, showing rapid and high dye buildup on paper, pigskin, cotton, and gelatin light filters and providing wetfast products, have the general formula I [R1 = H, Cl, Me, MeO, EtO, MeO2C; R2 = (un)substituted C1-3-alkyl; A- = anion]. 9,9-Bis(4-anilino)fluorene in AcOH was treated with 1,3,3-trimethyl-2-methyleneindoline-.omega.-carboxaldehyde at room temp. for 24 h and salted to give I (R1 = H, R2 = Me, A = Cl), .lambda.max in acetone 453 nm.

IT 6872-08-8 41568-14-3 59737-29-0

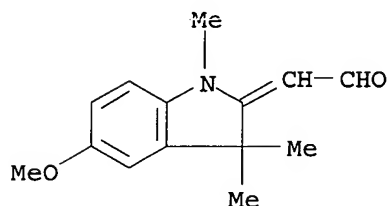
59737-30-3 111281-51-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with bis(aminophenyl)fluorene)

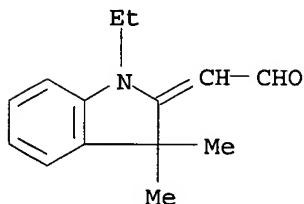
RN 6872-08-8 CAPLUS

CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)



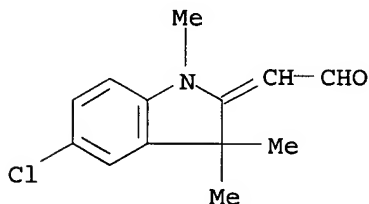
RN 41568-14-3 CAPLUS

CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)



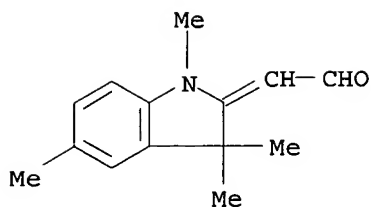
RN 59737-29-0 CAPLUS

CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)

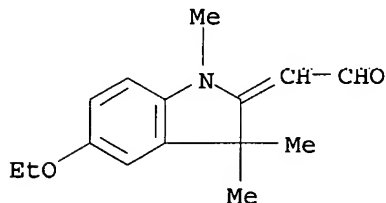


RN 59737-30-3 CAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)- (9CI) (CA INDEX NAME)

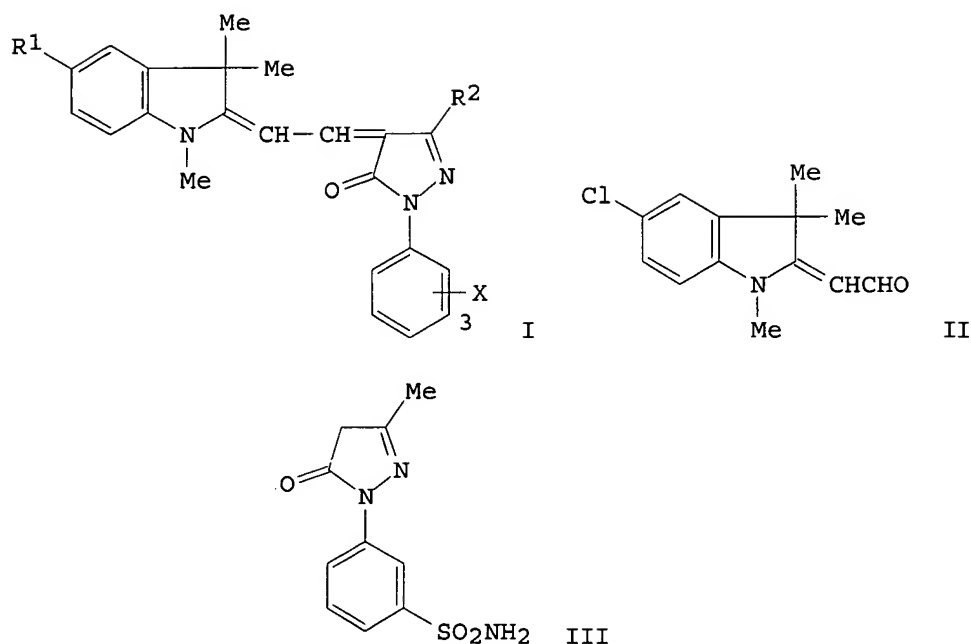


RN 111281-51-7 CAPLUS
 CN Acetaldehyde, (5-ethoxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) -
 (9CI) (CA INDEX NAME)



L8 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1991:516297 CAPLUS
 DOCUMENT NUMBER: 115:116297
 TITLE: Methine dyes, their preparation and use for coloring
 organic polymers and resins
 INVENTOR(S): Nakamatsu, Toshio; Terao, Masanobu
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan; Daiei Chemical
 Co., Ltd.
 SOURCE: Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 419110	A1	19910327	EP 1990-309927	19900911
EP 419110	B1	19950315		
R: CH, DE, GB, LI				
JP 03109466	A2	19910509	JP 1989-247413	19890922
US 5136045	A	19920804	US 1990-581114	19900912
PRIORITY APPLN. INFO.:			JP 1989-247413	19890922
OTHER SOURCE(S):	MARPAT 115:116297			
GI				



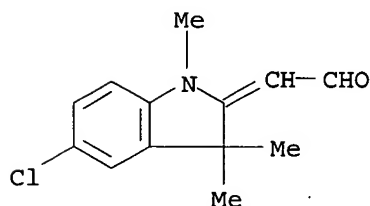
AB Methine dyes I [R1 = H, halogen, lower alkyl, lower alkoxy, NO2, carboxylic acid lower alkyl ester; R2 = lower alkyl, CONH2, carboxylic acid lower alkyl ester; X = SO2NR3R4, SO2N:CHNR5R6, SO2R7; R3, R4 = H, lower alkyl, Ph; R5, R6 = lower alkyl; R7 = lower alkyl, CH2CH2OH], useful as nonbleeding and heat-resistant coloring agents for polymers and resins, are prepd. Thus, indoline deriv. II was condensed with pyrazolone III in Ac2O at 130.degree. for 30 min, forming I (R1 = Cl, R2 = Me, X = 3-SO2NH2), .lambda.max (DMF) 480 nm, 0.1 part of which was blended with 100 parts acrylonitrile-butadiene-styrene copolymer; the blend was extruded at 205.degree. to obtain colored pellets, which were molded at 230.degree., producing yellowish orange moldings which had superior heat, light, and bleeding resistance.

IT 59737-29-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with pyrazolone deriv.)

RN 59737-29-0 CAPLUS

CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI) (CA INDEX NAME)



L8 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:542426 CAPLUS

DOCUMENT NUMBER: 113:142426

TITLE: Magenta filters

INVENTOR(S) : Elwood, James K.

PATENT ASSIGNEE(S) : Eastman Kodak Co., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4889410	A	19891226	US 1988-240326	19880906
EP 358439	A1	19900314	EP 1989-308958	19890905
EP 358439	B1	19940601		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 02124501	A2	19900511	JP 1989-228450	19890905
AT 106579	E	19940615	AT 1989-308958	19890905
PRIORITY APPLN. INFO.:			US 1988-240326	19880906
			EP 1989-308958	19890905

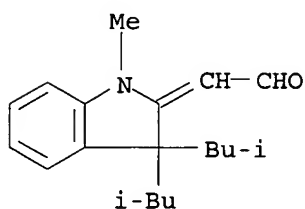
OTHER SOURCE(S): MARPAT 113:142426

AB In a color filter array comprising sets of differently colored filters, the magenta filters comprise an indolocarboxyanine dye in which the 3-position of each indole nucleus has .gtoreq.1 C3-12 alkyl group attached which is unbranched at the 1st C atom. The filters exhibit improved light stability. The filters may be used in light-sensitive semiconductor devices, e.g., image sensors.

IT **119648-62-3P**, 3,3-Diisobutyl-2-formylmethylene-1-methylindole
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and reaction of, filter dye from)

RN 119648-62-3 CAPLUS

CN Acetaldehyde, [1,3-dihydro-1-methyl-3,3-bis(2-methylpropyl)-2H-indol-2-ylidene]- (9CI) (CA INDEX NAME)



L8 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:156096 CAPLUS

DOCUMENT NUMBER: 110:156096

TITLE: Improved magenta filters

AUTHOR(S): Anon.

CORPORATE SOURCE: UK

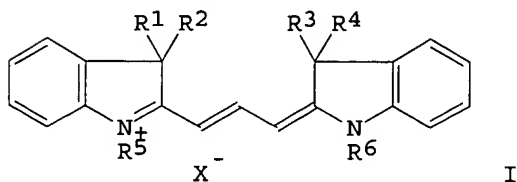
SOURCE: Research Disclosure (1988), 295, 857-64
 CODEN: RSDSBB; ISSN: 0374-4353

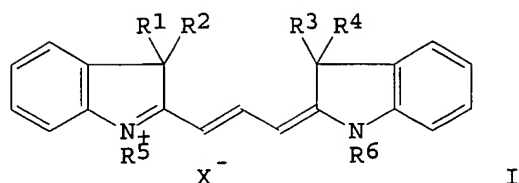
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): MARPAT 110:156096

GI



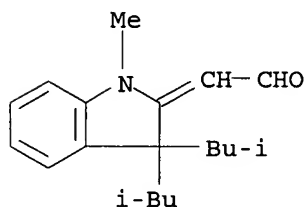


AB I (R1-R4 = C2-6-alkyl; R5,R1 = optionally substituted alkyl; X- = anion) were prepd. for use in color filters with improved light stability, optionally in combination with singlet oxygen quenchers. For example, 3,3-diethyl-1,2-dimethyl-(3H)-indolium iodide was boiled with an equimolar amt. of 3,3-diisobutyl-2-(formylmethylene)-1-methylindole in Ac2O, and the product treated with Amberlite IRA 400 and triflic acid to give 3,3-diisobutyl-3,3'-diethyl-1,1'-dimethylindolocarbocyanine triflate (I; R1 = R2 = iso-Bu; R3=R4=Et; R5=R6=Me; X- =F3CSO3-).

IT **119648-62-3P**, 3,3-Diisobutyl-2-(formylmethylene)-1-methylindole
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and condensation with diethyldimethylindolium iodide)

RN 119648-62-3 CAPLUS

CN Acetaldehyde, [1,3-dihydro-1-methyl-3,3-bis(2-methylpropyl)-2H-indol-2-ylidene]- (9CI) (CA INDEX NAME)



L8 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:439399 CAPLUS

DOCUMENT NUMBER: 109:39399

TITLE: Disperse dyes

INVENTOR(S): Naef, Rudolf

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 11 pp.
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 258180	A2	19880302	EP 1987-810439	19870731
EP 258180	A3	19891108		
R: CH, DE, FR, GB, LI				
US 4750228	A	19880614	US 1987-79981	19870731
JP 63043958	A2	19880225	JP 1987-195401	19870806
PRIORITY APPLN. INFO.:		CH 1986-3158		19860806

OTHER SOURCE(S): MARPAT 109:39399

GI For diagram(s), see printed CA Issue.

AB The title compds. I [R = CN, C1-6 alkoxy carbonyl, C1-6 alkyl carbonyl, (un)substituted H2NCO; R1 = arom. ring residue; R2 = residue of 5-or 6-membered ring contg. .gtoreq.1 N and .gtoreq.1 double bond], are prepd. and are useful for dyeing or printing of semisynthetic or synthetic materials, esp. linear arom. polyester fibers, or for melt dyeing of

thermoplastics. Thus, 2-formylmethylene-1,3,3-trimethylindolenine was condensed with 3-dicyanomethylene-2,3-dihydro-1-benzothiophene 1,1-dioxide, forming II, which dyed polyester fabrics in a fast red-blue shade.

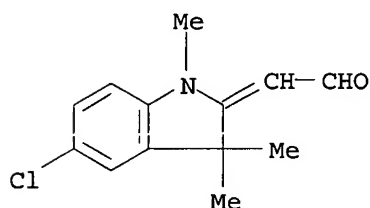
IT 59737-29-0

RL: USES (Uses)

(condensation of, with (dicyanomethylene)dihydrobenzothiophene dioxide)

RN 59737-29-0 CAPLUS

CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-(9CI) (CA INDEX NAME)



L8 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1987:638576 CAPLUS

DOCUMENT NUMBER: 107:238576

TITLE: Cationic dyes

INVENTOR(S): Hiraki, Masahiro; Shimizu, Yoshiaki

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

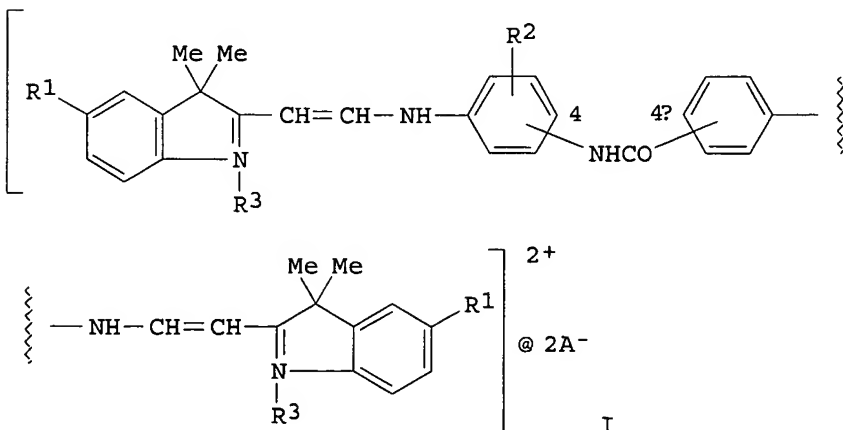
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62167361	A2	19870723	JP 1986-7981	19860120
JP 06023317	B4	19940330		
PRIORITY APPLN. INFO.:			JP 1986-7981	19860120

GI



AB Yellow dyes I [R1 = H, Cl, Me, MeO, EtO, MeO2C; R2 = H, Cl, Me, MeO; R3 = Cl-3 (hydroxy)alkyl, Cl-4 alkoxy, halogen, cyano, CONH2, (substituted) Ph or PhO; A- = anion] are useful on paper, cotton, tanned pigskin, rayon,

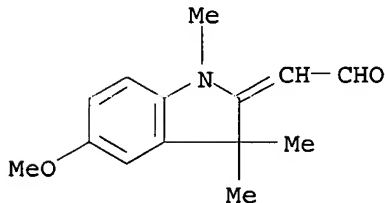
and gelatin. Thus, 4,4'-diaminobenzaldehyde was treated with 1,3,3-trimethyl-2-methyleneindolin-.omega.-aldehyde in an aq. lactic acid soln. at 60.degree. for 5 h to give I (R1 = R2 = H; R3 = Me; A- = lactate; 4,4'-bonding).

IT 6872-08-8 41568-14-3 59737-30-3
111281-51-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with diaminobenzanilide derivs.)

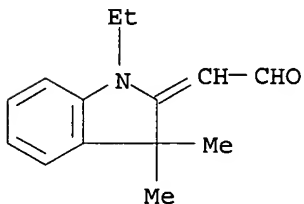
RN 6872-08-8 CAPLUS

CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



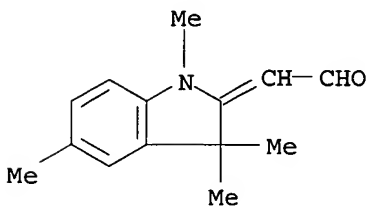
RN 41568-14-3 CAPLUS

CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



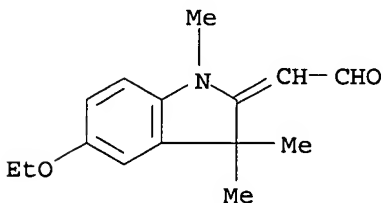
RN 59737-30-3 CAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)

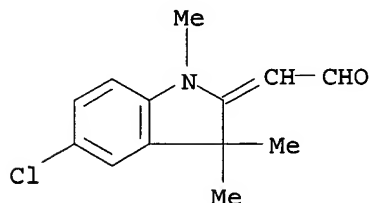


RN 111281-51-7 CAPLUS

CN Acetaldehyde, (5-ethoxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



IT 59737-29-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with diaminobenzanilides)
 RN 59737-29-0 CAPLUS
 CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-
 (9CI) (CA INDEX NAME)



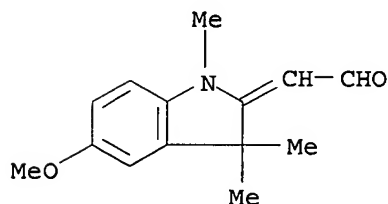
L8 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1986:505845 CAPLUS
 DOCUMENT NUMBER: 105:105845
 TITLE: Thermal-transfer recording method
 INVENTOR(S): Hashimoto, Kiyoyasu; Nishikuri, Masao; Takeshita, Akira
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60220785	A2	19851105	JP 1984-78163	19840417
JP 07039207	B4	19950501		

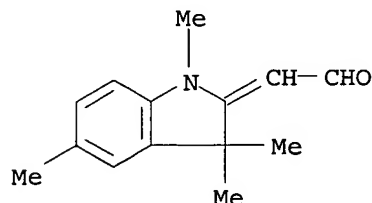
PRIORITY APPLN. INFO.: JP 1984-78163 19840417

AB The title method involves selective heating of a transfer sheet contg. a compd. having an active Me or methylene group and contacting of the transfer sheet with a receptor sheet contg. an aldehyde and/or a nitroso compd. The method provides high-d. and stable images with gradation. Thus, a transfer sheet was prepd. by coating a condenser paper sheet with a compn. contg. 4-dimethylaminobenzaldehyde 6, Et cellulose 6, and iso-PROH 88 parts. A receptor sheet was prepd. by coating a support with a compn. contg. malononitrile 5, a polyester 20, and MEK 70 parts. A heated iron test using a temp. between 120.degree. and 170.degree. (for 10 s and 30 g/cm2 wt.) gave clear, graded yellow images.

IT 6872-08-8 59737-30-3
 RL: USES (Uses)
 (thermal-transfer recording sheet contg., for clear graded image with receptor sheet contg. aldehyde or nitroso compd.)
 RN 6872-08-8 CAPLUS
 CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene)-
 (9CI) (CA INDEX NAME)



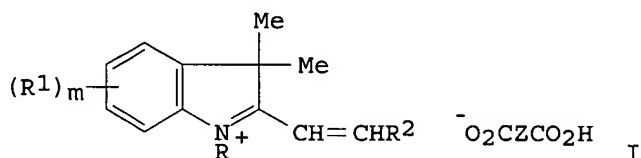
RN 59737-30-3 CAPLUS
 CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)- (9CI)
 (CA INDEX NAME)



L8 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1983:424030 CAPLUS
 DOCUMENT NUMBER: 99:24030
 TITLE: Cationic methine dyes
 INVENTOR(S): Raue, Roderich; Huehne, Volker; Kuehlthau, Hans Peter
 PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
 SOURCE: Ger. Offen., 36 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3136583	A1	19830331	DE 1981-3136583	19810915
IN 159272	A	19870425	IN 1982-DE612	19820811
US 4513142	A	19850423	US 1982-412644	19820830
EP 74569	A2	19830323	EP 1982-108091	19820902
EP 74569	A3	19831109		
EP 74569	B1	19850619		
R: BE, CH, DE, FR, GB, IT, LI				
JP 58061152	A2	19830412	JP 1982-159020	19820914
JP 02042113	B4	19900920		
BR 8205386	A	19830823	BR 1982-5386	19820914
PRIORITY APPLN. INFO.:			DE 1981-3136583	19810915

GI



AB Dyes of general structure I are prepd., where R = optionally substituted C1-4 alkyl; R1 = H or a substituent; R2 = substituted p-aminophenyl, indol-3-yl, or (3,3-dimethylindolin-2-ylidene)methyl; Z = single bond or HO- and (optionally) HO2C-substituted C1-4 alkylene; and m = 1-4. I dye substrates such as acrylic fibers and paper orange to bluish red shades, and are prepd. by reaction of approx. 1:1:1 M mixts. of methyleneindoline deriv., R2CHO, and HO2CZCO2H in the presence or absence of an org. solvent. Thus, addn. of oxalic acid [144-62-7] to a melt of 4-[(2-cyanoethyl)methylamino]benzaldehyde [94-21-3] and 1,3,3-trimethyl-2-methyleneindoline [118-12-7] at 75.degree., heating to 100.degree., and removal of liberated H2O under vacuum gave solid I (R =

Me, R1 = H, R2 = C6H4NMeCH2CH2CN, Z = single bond) [84100-86-7], a brilliant red dye for acrylic fibers.

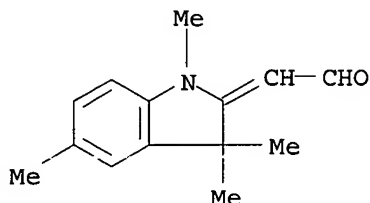
IT 59737-30-3

RL: USES (Uses)

(condensation of, with trimethylmethyleindoline in presence of oxalic acid)

RN 59737-30-3 CAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)- (9CI)
(CA INDEX NAME)



L8 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1983:197291 CAPLUS

DOCUMENT NUMBER: 98:197291

TITLE: Conformational analysis of carbonyl derivatives of 1,3,3-trimethyl-2-methyleneindoline

AUTHOR(S): Zemlyanoi, V. N.; Mushkalo, I. L.; Kornilov, M. Yu.; Boldeskul, I. E.; Dekhtyar, M. L.

CORPORATE SOURCE: Inst. Org. Khim., Kiev, 252660, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1983), (3), 361-4

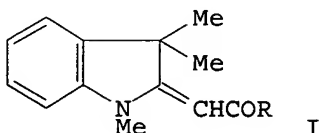
CODEN: KGSSAQ; ISSN: 0453-8234

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 98:197291

GI



AB NMR studies with a lanthanide shift reagent indicated that the double bond in I (R = H, Me, Ph, 2-thienyl) had the E configuration. The aldehyde group had the s-trans conformation and the keto groups the s-cis. IR data confirmed these conformations.

IT 85654-15-5

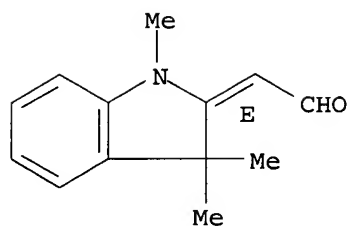
RL: PRP (Properties)

(configuration and conformation of)

RN 85654-15-5 CAPLUS

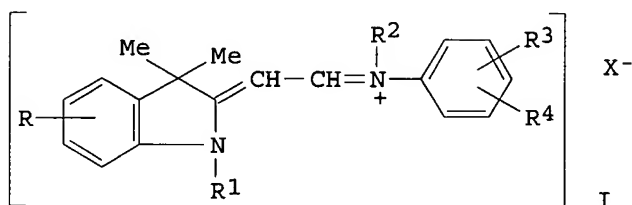
CN Acetaldehyde, (1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L8 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1979:440910 CAPLUS
 DOCUMENT NUMBER: 91:40910
 TITLE: Production of pure cationic dyes
 INVENTOR(S): Kast, Hellmut
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
 SOURCE: Brit., 9 pp.
 CODEN: BRXXAA
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1528590	A	19781011	GB 1975-53099	19751230
PRIORITY APPLN. INFO.: GI			GB 1975-53099	19751230



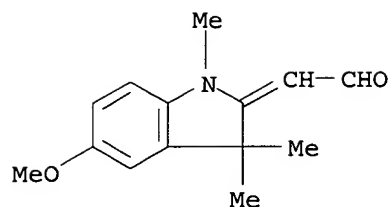
AB The bright yellow cationic dyes I (e.g. R1 = Me; R2 = H; R3,R4 = H, Cl, Me, or MeO; R = H, Cl, or MeO; X = HSO4-, AcO-), for acrylic fibers, were prepd. by the acid catalyzed condensation of the appropriate substituted methylenindoline-.omega.-aldehyde with an amine. Thus, 1,3,3-trimethyl-2-methylenindoline-.omega.-aldehyde [84-83-3] condensed with 2,4-dimethoxyaniline [2735-04-8] in the presence of HCO2H and H2SO4 to give I (R1 = Me, R2 = H, R3 = 2-MeO, R4 = 4-MeO, X = HSO4) [59737-31-4] in 89.2% yield. About 22 similar cationic dyes were prepd.

IT 6872-08-8 41568-14-3 59737-29-0
 59737-30-3

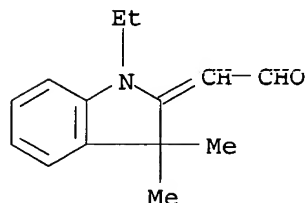
RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with arom. amines)

RN 6872-08-8 CAPLUS

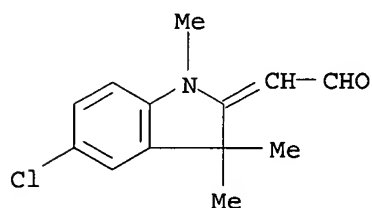
CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene) -
 (9CI) (CA INDEX NAME)



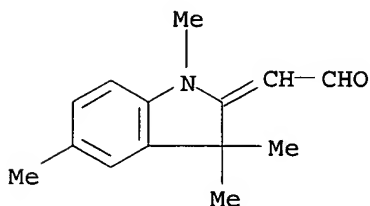
RN 41568-14-3 CAPLUS
 CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene) - (9CI)
 (CA INDEX NAME)



RN 59737-29-0 CAPLUS
 CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI)
 (CA INDEX NAME)



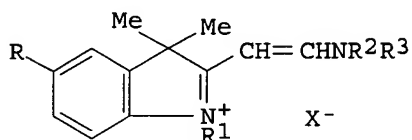
RN 59737-30-3 CAPLUS
 CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene) - (9CI)
 (CA INDEX NAME)



L8 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1977:424782 CAPLUS
 DOCUMENT NUMBER: 87:24782
 TITLE: Pure cationic dyes
 PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
 SOURCE: Belg., 19 pp.
 CODEN: BEXXAL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 837655	A1	19760716	BE 1976-163582	19760116
PRIORITY APPLN. INFO.:			BE 1976-163582	19760116

GI



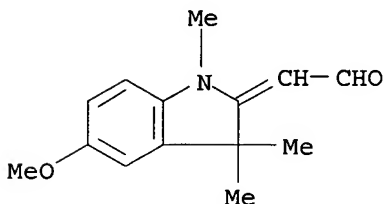
AB Cationic dyes [I, R = H, Me, Cl, MeO; R1 = Me, Et, PhCH2; R2 = H, R3 = substituted phenyl, or R2R3N = N-contg. heterocycle], used for dyeing acrylic fibers, were prepd. in high yield and purity by condensing 1,3,3-trimethyl-2-indolinyldeneacetaldehyde (II) [84-83-3] and its deriv. with R2R3N in the presence of a carboxylic or an arom. sulfonic acid, optionally a mineral acid, and an inert org. solvent at 20-40.degree.. Thus, a soln. of II 303 and 2,4-(MeO)2C6H3NH2 [2735-04-8] 230 in MeOH [67-56-1] 900 and HCO2H [64-18-6] 80 parts was stirred 15-20 min at 20-30.degree. and H2SO4 was added dropwise to give 89.2% I (R = R2 = H, R1 = Me, R3 = 2,4-(MeO)2C6H3, X = HSO4) [59737-31-4].

IT 6872-08-8 59737-29-0 59737-30-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aniline derivs.)

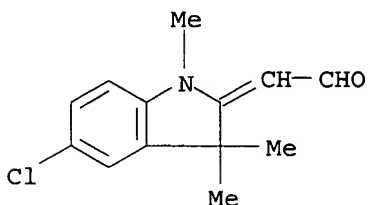
RN 6872-08-8 CAPLUS

CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



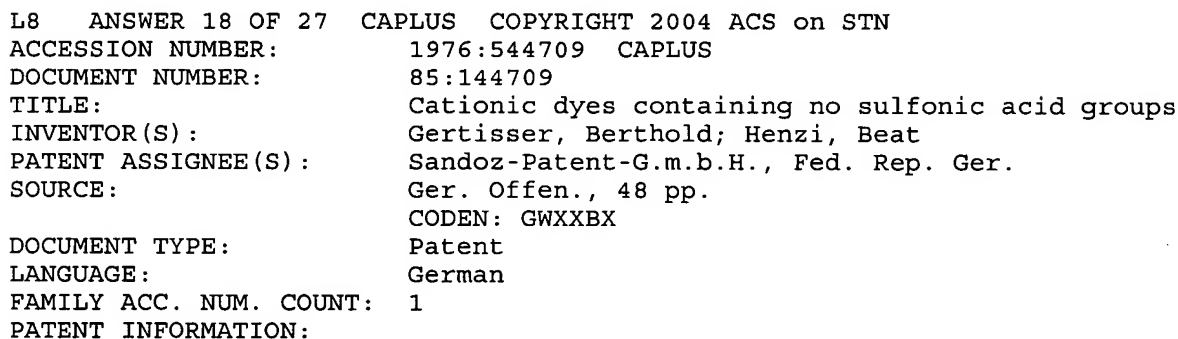
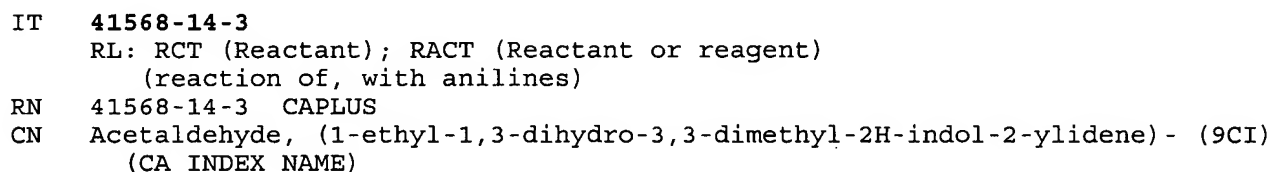
RN 59737-29-0 CAPLUS

CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



RN 59737-30-3 CAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2503098	A1	19760729	DE 1975-2503098	19750125
PRIORITY APPLN. INFO.:			DE 1975-2503098	19750125
GI				

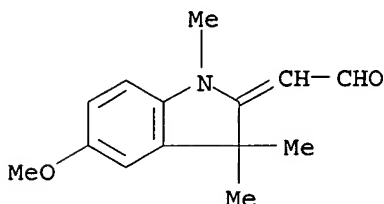


AB Cationic dyes [I, R = H, MeO; R1 = H, Me; or (NR1R2) = tetrahydropyrrole residue; X = Cl, MeSO4] were prepd. and used to dye acrylic and acid-modified polyamide and polyester fibers in fast, brilliant greenish yellow shades. Thus, a mixt. of 4-(2-phenoxyethoxy)aniline [35965-96-9] and 1,3,3-trimethyl-5-methoxy-2-methyleneindolenine- ω -aldehyde [6872-08-8] was heated at 30-60.degree. in the presence of dil. HCl

IT 6872-08-8

RN 6872-08-8 CAPLUS

CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene)-
(9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1976:448279 CAPLUS

DOCUMENT NUMBER: 85:48279

TITLE: Pure cationic dyes from 1,3,3-trialkyl-2-methyleneindoline-.omega.-aldehydes

INVENTOR(S) : Kast, Hellmut

PATENT ASSIGNEE(S) : BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 20 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

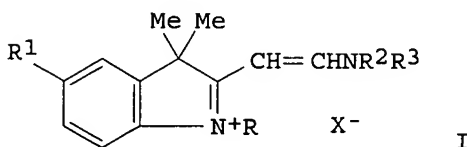
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2452330	A1	19760506	DE 1974-2452330	19741105
PRIORITY APPLN. INFO.:			DE 1974-2452330	19741105

GI



AB Title dyes (I, R = alkyl; R1 = H, Cl, Me, MeO; NR2R3 = aniline or cyclic amine residue; X = org. or inorg. acid anion) are prepd. in high yield by condensation of 1,3,3-trialkyl-2-methyleneindoline-.omega.-aldehydes with anilines or cyclic secondary amines at 20-40.degree. in the presence of a carboxylic or sulfonic acid and an org. solvent. The products are obtained as solids or as concd. solns. in org. solvents. For example, 80 parts HCO2H was added to a soln. of 1,3,3-trimethyl-2-methyleneindoline-.omega.-aldehyde [84-83-3] 303 and 2,4-dimethoxyaniline [2735-04-8] 230 in MeOH 900 parts at 20-30.degree.. The mixt. was stirred 15-30 min at 20-30.degree., treated dropwise with 148 parts H2SO4 while maintaining 15-25.degree., and cooled to 5-10.degree. to ppt. I [R = Me, R1 = H, NR2R3 = NHC6H3(OMe)2-2,4, X = HSO4] (II) [59737-31-4] in 89.2% yield. II dyed acrylic fibers brilliant greenish yellow shades. Twenty-eight other I were prepd.

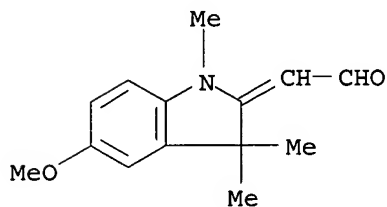
IT 6872-08-8 41568-14-3 59737-30-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with anisidine)

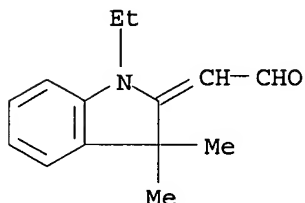
RN 6872-08-8 CAPLUS

CN Acetaldehyde, (1,3-dihydro-5-methoxy-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



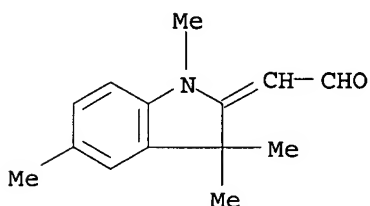
RN 41568-14-3 CAPLUS

CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



RN 59737-30-3 CAPLUS

CN Acetaldehyde, (1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)

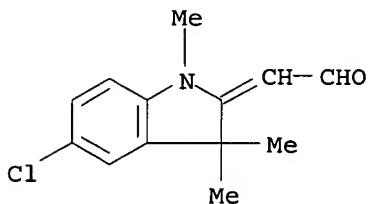


IT 59737-29-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethoxyaniline)

RN 59737-29-0 CAPLUS

CN Acetaldehyde, (5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene) - (9CI) (CA INDEX NAME)



TITLE: Dyeing of anionically modified fibers
 INVENTOR(S): Kuehlthian, Hans Peter
 PATENT ASSIGNEE(S): Bayer A.-G.
 SOURCE: Ger. Offen., 51 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2152948	A1	19730426	DE 1971-2152948	19711023
BE 790359	A1	19730420	BE 1972-123313	19721020
NL 7214256	A	19730425	NL 1972-14256	19721020
JP 48050087	A2	19730714	JP 1972-104590	19721020
IT 966421	A	19740211	IT 1972-53489	19721020
CH 7215322	A4	19750430	CH 1972-15322	19721020
CH 568445	B	19751031		
FR 2156919	A1	19730601	FR 1972-37481	19721023
GB 1363359	A	19740814	GB 1972-48698	19721023
US 3925015	A	19751209	US 1972-299658	19721024
US 3980430	A	19760914	US 1975-564104	19750401
US 4042322	A	19770816	US 1976-700893	19760629

PRIORITY APPLN. INFO.: DE 1971-2152948 19711023
 US 1972-299658 19721024
 US 1975-564104 19750401

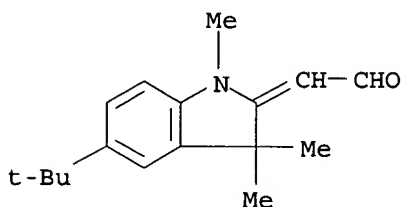
AB Anionically modified acrylic, polyester, or polyamide fibers were dyed with Me₃C group-contg. cationic dyes, e.g. I, in C12C:CC12 with reproducible level shades. Thus, anionically modified acrylic fibers were dyed in a C12C:CC12 bath contg. I 1, ethanolamide of oleic acid 1, 1:20 moles oleyl alc.-ethylene oxide adduct 1, H₂O 8, and HOAc 1 g 60 min at 100.deg. and 1:10 bath ratio to give fast, golden yellow shades.

IT 42219-83-0

RL: USES (Uses)
 (in cationic dye manuf.)

RN 42219-83-0 CAPLUS

CN Acetaldehyde, [5-(1,1-dimethylethyl)-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene]- (9CI) (CA INDEX NAME)



L8 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1973:125841 CAPLUS
 DOCUMENT NUMBER: 78:125841
 TITLE: Yellow-orange fluorescent methine dyes
 INVENTOR(S): Tanaka, Toshiki
 PATENT ASSIGNEE(S): Nihon Kasei Kogyo, Inc.
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

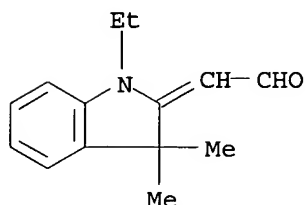
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47032183	B4	19721114	JP 1971-19240	19710401
CA 976960			CA	
JP 49044032		19740000	JP	
US 3860587		19750000	US	

AB The title methine dyes I (R = Me, Et, or CH₂CH₂CN, R₁ = substituted 2-benzimidazolyl, 2-benzotriazolyl, 2-benzothiazolyl, or 2-benzoxazolyl, X = Cl, 0.5 SO₄²⁻, or OAc) and methine dye (II) [39700-29-3] for fibers, paper, and plastics were prepd. For example, 1-ethyl-3,3-dimethyl-2-methyleneindoline-.omega.-aldehyde was treated with 2-(p-aminophenyl)-6-diethylaminobenzoxazole in the presence of HCl to give basic methine dye (I, R = Et, R₁ = 6-diethylamino-2-benzoxazolyl, X = Cl) (III) [39582-33-7]; 3 other I were prepd. An acrylic textile dyed with III had lightfastness (JIS L 1044) 7 and washfastness (JIS L 1045, MC 3) 5.

IT **41568-14-3**
 RL: USES (Uses)
 (reaction with (aminophenyl) (diethylaminobenzoxazol)

RN 41568-14-3 CAPLUS

CN Acetaldehyde, (1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)- (9CI)
 (CA INDEX NAME)



L8 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1964:31648 CAPLUS

DOCUMENT NUMBER: 60:31648

ORIGINAL REFERENCE NO.: 60:5696h,5697a

TITLE: Dyeing or printing synthetic polymers. Farbenfabriken Bayer A.-G.

SOURCE: 7 pp.; Division of Brit. 929,393 (CA 60, 5680d)

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 929394		19630619	GB	
DE 1172388			DE	
US 3255204		1966	US	

PRIORITY APPLN. INFO.: DE 19580822

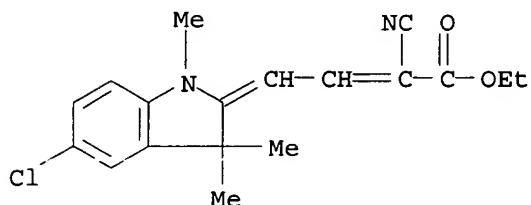
AB Fibers and other materials made from synthetic polyamides, polyurethans, and aromatic polyesters can be given dyeings and prints distinguished by brilliancy and excellent fastness to light by applying the methine dyes of Brit. 929,393, Brit. 929,395 (loc. cit.). Thus, a paste was made by dispersing 20 parts of the dye prepd. from 1,3,3-trimethyl-5-carbomethoxy-2-methyleneindoline-.omega.-aldehyde and NCCH₂CO₂Et with 80 parts of a condensation product (I) of HCHO and a naphthalenesulfonic acid and with a little H₂O and drying in vacuo at 50.degree.. Yarn made from .epsilon.-caprolactam was dyed greenish yellow by introducing it at 50.degree. into a dyebath contg. 0.66 g. per l. of the dye dispersion and 0.5 g. I, with a liquor-to-goods ratio of 35: 1, heating to 100.degree. in 30 min. and continuing for 1 hr., rinsing the yarn with H₂O, and drying.

IT **95125-53-4**, .DELTA.2,.gamma.-Indolinecrotonic acid,
 5-chloro-.alpha.-cyano-1,3,3-trimethyl-, ethyl ester **95277-55-7**,

.DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-5-methoxy-1,3,3-trimethyl-, ethyl ester **95316-60-2**, .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3,5-tetramethyl-, ethyl ester **96000-62-3**, .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3-trimethyl-, ethyl ester (prepn. of)

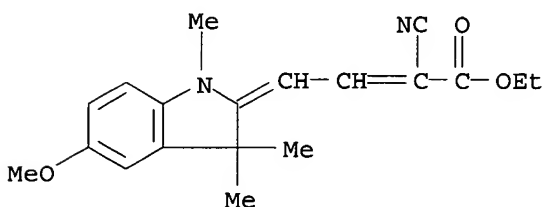
RN 95125-53-4 CAPLUS

CN .DELTA.2,.gamma.-Indolinecrotonic acid, 5-chloro-.alpha.-cyano-1,3,3-trimethyl-, ethyl ester (7CI) (CA INDEX NAME)



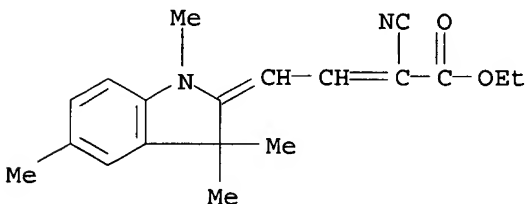
RN 95277-55-7 CAPLUS

CN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-5-methoxy-1,3,3-trimethyl-, ethyl ester (7CI) (CA INDEX NAME)



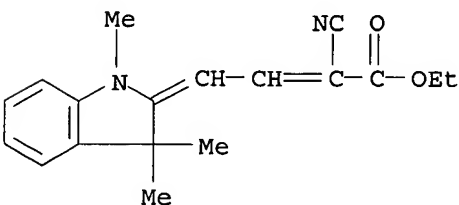
RN 95316-60-2 CAPLUS

CN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-1,3,3,5-tetramethyl-, ethyl ester (7CI) (CA INDEX NAME)



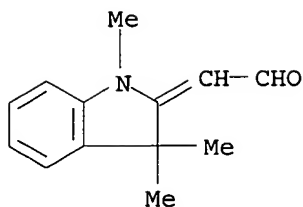
RN 96000-62-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1959:75211 CAPLUS
 DOCUMENT NUMBER: 53:75211
 ORIGINAL REFERENCE NO.: 53:13610b-g
 TITLE: Heterocyclic polymethine dyes
 INVENTOR(S): Berrie, Alistair H.; Piggott, Henry A.
 PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	GB 806817		19581231	GB	
GI	For diagram(s), see printed CA Issue.				
AB	<p>Pale-yellow to greenish yellow heterocyclic polymethine dyes of excellent wet- and light-fastness on wool and having the general formula I, where R and R1 are the same or different and are H or alkyl groups or may be joined to form a cycloalkyl, R2 is an alkyl or alkylene group connected to ring A in ortho position to the N atom to form a heterocyclic ring, R3, R4, and R5 are the same or different alkyl groups, and rings A and B may be further substituted, are made by treating 1 mole of a compd. of the general formula (4-R2NHC6H4)2C(R)(R1) with 2 moles of a 2-formylmethylene-1,3,3-trialkylindoline in acid soln. and further sulfonating with oleum. Thus, 2-methylindoline 266 and 36% aq. HCl 100 were stirred at 80.degree. and 37% aq. HCHO 81 parts was added. The mixt. was refluxed for 16 hrs., then poured into water 2000 and Na2CO3 106 parts. Unreacted compds. were steam distd. off and the bis(2-methyl-5-indolinyl)methane (II), b0.1 250-60.degree., was sepd. by decantation and distn. A soln. of II 278 in 30% aq. H2SO4 2000 was added to a soln. of 2-formylmethylene-1,3,3-trimethylindoline (III) 603 in 30% aq. H2SO4 2000 parts and the mixt. was stirred for 48 hrs. at 20.degree.. The product, bis{2-methyl-1-[2-(1,3,3-trimethyl-2-indoleniniumyl)vinyl]-5-indolinyl}methane sulfate 5 was added to 20% oleum 25 parts and the mixt. was stirred at 20.degree. until 1 drop was sol. in 2 cc. cold water. The product was a greenish yellow dye. Similarly, pale-yellow sulfonated bis{4-{N-[2-(1,3,3-trimethyl-2-indoleniniumyl)vinyl]-N-methylamino}phenyl}methane sulfate was made by replacing II by bis(4-methylaminophenyl)methane; greenish yellow sulfonated bis{1,2,3,4-tetrahydro-1-[2-(1,3,3-trimethyl-2-indoleniniumyl)vinyl]-6-quinolyl}methane sulfate was made by replacing II by bis(1,2,3,4-tetrahydro-6-quinolyl)methane. In other examples, similar dyes were made by varying the intermediates so that the indoleniniumyl and quinolyl radicals were further substituted. Yellowish green sulfonated bis{2-methyl-1-[2-(5-butyl-1,3,3-trimethyl-2-indoleniniumyl)vinyl]-5-indolinyl}methane sulfate was made by replacing III by 2-formylmethylene-5-butyl-1,3,3-trimethylindoline.</p>				
IT	109020-14-6, Indolinesulfonic acid, 2-(formylmethylene)-1,3,3-trimethyl-				
	(manuf. of, and dyes therefrom)				
RN	109020-14-6 CAPLUS				
CN	Indolinesulfonic acid, 2-(formylmethylene)-1,3,3-trimethyl- (6CI) (CA INDEX NAME)				



D1-SO₃H

L8 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1954:41621 CAPLUS

DOCUMENT NUMBER: 48:41621

ORIGINAL REFERENCE NO.: 48:7431f-i,7432a-i,7433a-d

TITLE: Light absorption and constitution of merocyanines

AUTHOR(S): Coenen, Max; Pestemer, Max

SOURCE: Zeitschrift fuer Elektrochemie und Angewandte
Physikalische Chemie (1953), 57, 785-95
CODEN: ZEAPAA; ISSN: 0372-8323

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Mols. with conjugated double bonds in a chain, with auxochromic N atoms and antiauxochromes, CN or COOR, at opposite ends, were studied with respect to their light absorption in the visible and ultraviolet regions. CN and COOR give approx. the same bathochromic shift. :C(CN)2 and :C(CN)(COOR) show similar spectra; introduction of: C(COOR)2 gives a bathochromic shift, as does increasing the length of the polymethine chain. Polymethine chains substituted in the 2 and 3 positions prefer a "boat" form and give simpler and higher absorption bands than do unsubstituted chains. The CN group has an inductive effect, but no mesomeric effect. Compds. studied were (compd., absorption max. (A) (log .epsilon.)): cinnamionitrile, 2740(4.23); methyl cinnamate, 2760(4.37); methyl .alpha.-cyanocinnamate, 3049(4.30); methyl 2-cyano-5-phenyl-2,4-pentadienoate, 3413(4.492); Bu 1-cyano-6-phenylhexatrienecarboxylate (I) (Bu 2-cyano-7-phenyl-2,4,6-hexatrienoate), 3817(4.653), 2604(3.892); Bu 1-cyano-8-phenyloctatetraenecarboxylate (II) (Bu 2-cyano-9-phenyl-2,4,6,8-octatetraenoate), 4149(4.70), 2817(4.00); p-dimethylaminocinnamionitrile (III/IV isomers), 3620(4.55), 2451(4.06) (III), 3620(4.60), 2455(4.05) (IV); 1-cyano-4-(p-dimethylaminophenyl)-1,3-butadiene (V/VI isomers), 3906(4.43), 2610(4.22) (V), 3880(4.43), 2610(4.19) (VI); 1-cyano-6-(p-dimethylaminophenyl)-1,3,5-hexatriene (VII/VIII isomers), 4098(4.55), 2835(4.22) (VII), 4132(4.55), 2835(4.33) (VIII); ethyl p-dimethylaminocinnamate (IX), 3635(4.423), 2440(4.01); ethyl .alpha.-carbethoxy-p-dimethylaminocinnamate (X), 3760(4.58), 2495(4.03); .alpha.-cyano-p-dimethylaminocinnamionitrile (XI), 4325(4.69), 3185(3.30), 3065(3.27), 2685(3.88); 1,1-dicyano-4-(p-dimethylaminophenyl)-1,3-butadiene (XII), 4830(4.62), 3145(3.76), 2985(3.76), 2795(3.85); Bu .alpha.-cyano-p-dimethylaminocinnamate (XIII), 4230(4.715), 3215(3.38), 3067(3.32), 2963(3.935); Bu 2-cyano-5-(p-dimethylaminophenyl)-2,4-pentadienoate (XIV), 4717(4.602), 2858(4.06); Bu 2-cyano-7-(p-dimethylaminophenyl)-2,4,6-hexatrienoate (XV), 4938(4.602), 3175(4.114), 2560(3.95); 1,3,3-trimethyl-2-(5,5-dicyano-2,4-pentadienylidene)indoline (XVI), 5265(4.965), 3105(3.642), 2705(3.675); 1,3,3-trimethyl-2-(5,5-dicyano-4-methyl-2,4-pentadienylidene)indoline (XVII), 5235(4.903), 3105(3.672), 2705(3.653); 1,3,3-trimethyl-2-(5,5-dicyano-4-ethyl-2,4-pentadienylidene)indoline (XVIII), 5250(4.852), 2925(3.92); 1,3,3-trimethyl-2-(5,5-dicyano-3-ethyl-2,4-pentadienylidene)indoline (XIX), 5265(4.995), 2815(3.755); 1,3,3-trimethyl-2-(5,5-dicyano-4-ethyl-3-methyl-2,4-pentadienylidene)indoline (XX), 5305(4.767), 2940(4.080); 2-[2-(1,3,3-trimethylindolinylidene)ethylidene]cyclohexylidenemalononitrile

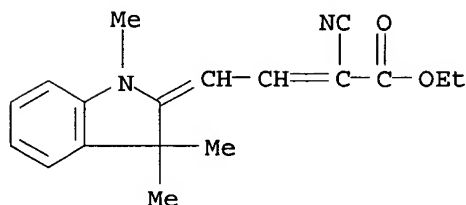
e (XXI), 5495(4.582), 2940(4.248); 2-[2-(1,3,3-trimethylindolinylidene)ethylidene]cyclopentylidenemalononitrile (XXII), 5700(4.84), 2780(4.23); Me 2-[2-(1,3,3-trimethylindolinylidene)ethylidene]cyclohexylidenecyanoacetate (XXIII), 5090(4.431), 2965(4.328); Me 2-[2-(1,3,3-trimethylindolinylidene)ethylidene]cyclopentylidenecyanoacetate (XXIV), 5495(4.725), 2875(2.600); 1,3,3,5-tetramethyl-2-(5-cyano-5-butoxycarbonyl-2,4-pentadienylidene)indoline (XXV), 5335(4.955), 3185(3.725), 2740(3.748); Me 2-[2-(1,3,3,5-tetramethylindolinylidene)ethylidene]cyclohexylidenecyanoacetate (XXVI), 5235(4.450), 2985(4.302); 1,3,3-trimethyl-2-(3,3-dicyanoallylidene)indoline (XXVII), 4350(4.85), 2940(3.40), 2595(3.83); and 1,3,3-trimethyl-2-(3-cyano-3-ethoxycarbonylallylidene)indoline (XXVIII), 4350(4.92), 2940(3.40), 2565(3.85). The first 4 compds. above were obtained by known methods. I obtained in 5-g. yield by warming a mixt. of 10.6 g. C₆H₅CHO, 15.1 g. Bu .alpha.-cyanosorbate (XXIX), 10 drops piperidine, and 0.4 g. piperidine acetate 2 days at 50.degree., adding 15 ml. MeOH, and cooling to 0.degree., yellow flakes from glacial HOAc, m. 150-1.degree.; similarly, cinnamaldehyde and XXIX give II. .alpha.-Cyano-p-dimethylaminocinnamic acid (XXX) obtained in 170-g. yield from 200 g. Et .alpha.-cyano-p-dimethylaminocinnamate in 2500 ml. MeOH and 210 g. 50% NaOH, refluxed one hr., poured into 12 l. HOH, and acidified with HOAc; 31 g. XXX, 280 g. acetamide, and 2 g. electrolytic Cu melted at 110.degree., heated with stirring to 170.degree. and to 190.degree. after CO₂ evolution ceased, cooled to 120.degree., and poured into 2 l. HOH, gave 20 g. of isomeric III/IV; 20 g. of the mixt. dissolved in 300 ml. boiling MeOH gave 3 g. IV, crystals from MeOH, m. 163.degree.; concn. (1/2 vol.) of the mother liquor from IV and addn. of HOH gave 11.5 g. III, crystals from 50% MeOH, m. 63.degree.. XIV and methanolic alkali heated 1/2 hr., dild. with 5 vols. HOH, and acidified with HOAc, gave 2-cyano-5-(p-dimethylaminophenyl)-2,4-pentadienoic acid (XXXI); 10 g. XXXI, treated as above, gave 6 g. isomeric V/VI; 30 g. of mixt. Soxhlet extd. with 50 ml. MeOH, gave 5.6 g. residue, and 11.7 g. crystals from filtrate on concg. it to 1/2 vol.; all solids crystd. from toluene gave yellow flakes of VI, m. 173.5.degree.; mother liquor from extn., evapd. to dryness, gave 12 g. V, yellow flakes from cyclohexane, m. 90-1.degree.. XV, 16.2 g., 8.4 g. caustic alkali, and 45 ml. MeOH, refluxed 1 hr., cooled, HOH added, acidified with HOAc, and impure acid purified through Na salt, gave 2-cyano-7-(p-dimethylaminophenyl)-2,4,6-hexatrienoic acid (XXXII), m. 205-7.degree. (decompn.); 5 g. XXXII, treated as before, gave 4.2 g. of isomeric VII/VIII; mixt. dissolved in 100 ml. C₆H₆, filtered, filtrate concd. to 1/4 vol., gave 1 g. VIII, crystals from benzene-cyclohexane, m. 191-2.degree.; filtrate, evapd. to dryness, gave 2 g. VII, golden crystals from cyclohexane, m. 116-17.degree.. p-Dimethylaminocinnamaldehyde (XXXIII) and Et acetate, with Na, gave IX, crystals from 80% EtOH, m. 75.degree.. Dimethylaminobenzaldehyde (XXXIV) and di-Et malonate, with piperidine, gave X, yellow flakes from EtOH, m. 110-11.degree.. XI obtained in 25-g. yield by heating XXXIV, 30 g., 13.5 g. malononitrile and 14 ml. Ac₂O 6 hrs. at 120.degree., red needles from xylene, m. 178-9.degree.. XII obtained from XXXIII and malononitrile. XIII obtained from XXXIV and Bu cyanoacetate with piperidine, yellow crystals from MeOH, m. 145-6.degree.. XIV obtained in 24-g. (40%) yield by heating 29.8 g. XXXIV, 33.6 g. Bu .alpha.-cyanocrotonate (XXXV), and 14 g. Ac₂O 6 hrs. at 120.degree., cooling to 50.degree., and adding 200 ml. MeOH, orange-red flakes from EtOH, m. 122-3.degree.. Similarly, XV obtained in 9-g. (27.7%) yield from 14.9 g. XXXIV, 19.3 g. XXIX, and 7 g. Ac₂O, purple crystals from MeOH, m. 162-3.degree.; XV also obtained from XXXIII and XXXV. Similarly, XVI obtained in 12-g. (31%) yield from 25.8 g. 1,3,3-trimethyl-2-methylenindolin-.omega.-carboxaldehyde (XXXVI), 11.8 g. ethylidenemalononitrile, and 20 ml. Ac₂O, violet crystals from xylene, m. 247-9.degree.; XVII obtained in 8.4-g. (57%) yield from 10 g. XXXVI, 5.3 g. isopropylidenemalononitrile, and 8 ml. Ac₂O, blue crystals from xylene, m. 265-6.degree.; XVIII obtained in 8-g. (54%) yield from 10 g. XXXVI and 6 g. 1-cyano-2-ethylcrotononitrile, purple flakes from iso-PrOH, m. 179-80.degree.; XIX obtained in 6.4-g. (42.5%) yield from 10 g. XXXVI and

6 g. butylidenemalononitrile, purple flakes from iso-PrOH, m. 180-2.degree.; XX obtained in 6.8-g. (43%) yield from 10 g. XXXVI and 6.7 g. isopentylidenemalononitrile, purple flakes from iso-PrOH, m. 165-6.degree.; XXI obtained in 8.6-g. (46%) yield from 10 g. XXXVI, 7.3 g. cyclohexylidenemalononitrile, and 7.6 g. Ac2O, dark-blue plates from ligroine, m. 154-5.degree.; XXII obtained in 37-g. (55%) yield from 43 g. XXXVI, 28 g. cyclopentylidenemalononitrile, and 20 ml. Ac2O, blue crystals from xylene, m. 273-5.degree.. XXIII obtained by heating 6 g. XXXVI, 5.4 g. Me cyclohexylidenecyanoacetate (XXXVII), and 18 ml. Ac2O 1 hr. at 70-80.degree., extg. with 6 .times. 50 ml. cyclohexane, washing exts. with 50% H2SO4, and neutralizing with NaOH to pH 5.5-6, red plates from MeOH, m. 127-8.degree.. As above, XXIV obtained in 20.5-g. (70%) yield from 17 g. XXXVI, 17 g. Me cyclopentylidenecyanoacetate, and 15 ml. Ac2O, violet crystals from iso-PrOH, m. 175-6.degree.; XXV obtained in 8.2-g. (45%) yield from 10.7 g. 1,3,3,5-tetramethyl-2-methylenindoline-.omega.-carboxaldehyde (XXXVIII), 8.3 g. Bu .alpha.-cyanocrotonate, and 50 ml. Ac2O, red plates from MeOH, m. 202.degree.; XXVI obtained from 21.5 g. XXXVIII and 18 g. XXXVII, red plates from MeOH, m. 160.degree.; XXVII obtained from XXXVI and malononitrile, orange plates from EtOH, m. 247-8.degree.; and XXVIII is obtained from XXXVI and Et cyanoacetate, yellow plates from MeOH, m. 147-8.degree..

IT 96000-62-3, .DELTA.2,.gamma.-Indolinecrotonic acid,
.alpha.-cyano-1,3,3-trimethyl-, ethyl ester
(spectrum of)

RN 96000-62-3 CAPLUS

CN 2-Butenoic acid, 2-cyano-4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1950:17640 CAPLUS

DOCUMENT NUMBER: 44:17640

ORIGINAL REFERENCE NO.: 44:3486e-i,3487a-c

TITLE: Cleavage reactions with .omega.-carboxylic acids of heterocyclic bases with an active methylene group

AUTHOR(S): Coenen, Max

SOURCE: Chemische Berichte (1949), 82, 66-72

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

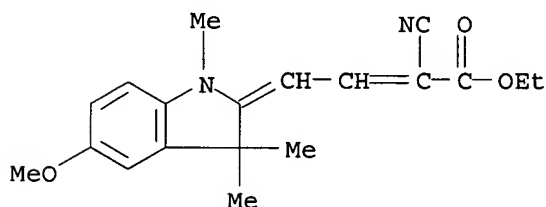
AB Attempts are made to prep. the free .omega.-carboxylic acids by sapon. of their amides or esters. Refluxing 8 hrs. 2.5 g. 5-methoxy-1,3,3-trimethyl-.DELTA.2,.alpha.-indolineacetanilide (I) (Ia, R = MeO, R' = CONHPh) with 3 g. KOH in 20 cc. EtOH gives 0.98 g. unchanged I and 0.478 g. PhNH2 but no free acid (II) (Ia, R = MeO, R' = CO2H). Refluxing 8 hrs. 2.5 g. I in 10 cc. MeOH with 3.1 g. 31.5% HCl gives 0.722 g. PhNH2, some 5-methoxy-1,3,3-trimethyl-2-methyleneindoline (III) (Ia, R = MeO, R' = H) but no II. Refluxing 50 g. 1,3,3-trimethyl-2-methyleneindoline (IV) (Ia, R = R' = H) and 35 g. Ph2NCOCl (V) in 30 cc. xylene 2.5 hrs. gives 5.4 g. 1,3-bis(1,3,3-trimethyl-2-indolinylidene)propanone (VI), m. 230-1.degree.. Distn. of the residue of the mother liquor gives 23.2 g. IV and 20.1 g. V, in addn. to 4.5 g. VI. Heating 20.3 g. III and 4.4 g. ClCO2Et 2.5 hrs. at 110-20.degree. and dilg. the cooled mixt. with 100 cc. PhMe gives 7.3 g.

unchanged III and, from the filtrate, 15 g. Et ester (VII) of II, pale yellow needles, m. 107.degree.. PhCH₂ ester (VIII), prepd. in the same way with ClCO₂CH₂Ph, pale yellow needles, b₅ 220-5.degree., m. 98-9.degree.. Ph ester (IX), yellow crystals, m. 132-3.degree.. Me ester (X), yellow needles, m. 123-4.degree., is prepd. in 4.5-g. yield by refluxing 8 hrs. 12.5 g. IX in 125 cc. N KOHMeOH. Refluxing 3.5 hrs. 17.2 g. IV with 4.5 g. ClCO₂Et in 10 cc. xylene gives 2.5 g. Et 1,3,3-trimethyl-.DELTA.2,.alpha.-indolineacetate (XI) (Ia, R = H, R' = CO₂Et), yellow needles, m. 135.degree.. Ph ester (XII) (Ia, R = H, R' = CO₂Ph), leaflets, m. 156-7.degree.. Refluxing 5 g. VII with 2.5 g. KOH in 50 cc. MeOH for 15 min. to 8 hrs. gives mixts., m. 95-104.degree., of VII and X but no II. Refluxing 4 hrs. 2.5 g. VIII with 25 cc. N KOH-MeOH gives a mixt., m. 85-6.degree., of VIII and X. Refluxing 8 hrs. 2.5 g. IX with 3.1 g. NaOH in 10 cc. EtOH and 10 cc. H₂O gives 1 g. VII, 0.2 g. III, and some PhOH. Refluxing 5 g. IX with 100 cc. 20% H₂SO₄ gives 0.6807 g. (almost 100%) CO₂; in the reaction mixt. are found 1.460 g. PhOH (100%) and 2.5 g. III (78%) (isolated with 2,4-(NO₂)₂ClOH₅Cl as the .omega.-dinitronaphthyl deriv.). Sapon. 6 hrs. of 2.5901 g. XII with 20% H₂SO₄ at 100.degree. gives 0.8530 g. (calcd. 0.8301 g.) PhOH and 0.3842 g. (0.3887 g.) CO₂. Boiling 8 hrs. 2.5 g. IX with 12.2 cc. NH₄OH and passing NH₃ through the mixt. leaves IX unchanged. Heating 2.5 g. IX with 12.2 cc. NH₄OH 5 hrs. at 125.degree. gives 80% III. IV (28 g.) and 10.4 g. ClCH₂CO₂Et are heated 4 hrs. in a CO₂ atm. at 160.degree., the mixt. dild. with an equal vol. of C₆H₆, and 11 g. IV.HCl filtered off; distn. of the residue of the filtrate gives 3 g. IV. The distn. residue (20 g.) consists chiefly of Et 1,3,3-trimethyl-.DELTA.2,.beta.-indolinepropionate, from which after sapon. with NaOH-MeOH is obtained 5 g. free acid, m. 123-4.degree. (decompn.). Heating 2.3 g. 5-methoxy-1,3,3-trimethyl-.DELTA.2,.alpha.-indolineacetaldehyde with 1.2 g. NCCH₂CO₂Et and 2 drops piperidine at 100.degree. and sapon. the crude Et (.alpha.-cyano-5-methoxy-1,3,3-trimethyl-2-methylen-.DELTA..alpha.,.gamma.-indolinecrotonate) gives 1.5 g. free acid, yellow cryst. powder, m. 174-5.degree..

IT 95277-55-7, .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-5-methoxy-1,3,3-trimethyl-, ethyl ester (prepn. of)

RN 95277-55-7 CAPLUS

CN .DELTA.2,.gamma.-Indolinecrotonic acid, .alpha.-cyano-5-methoxy-1,3,3-trimethyl-, ethyl ester (7CI) (CA INDEX NAME)



L8 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1935:47989 CAPLUS

DOCUMENT NUMBER: 29:47989

ORIGINAL REFERENCE NO.: 29:6248f-g

TITLE: Indole derivatives

INVENTOR(S): Wolff, Paul

PATENT ASSIGNEE(S): I. G. Farbenindustrie AG

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

=> file beilstein
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
139.81	337.12

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-18.71	-18.71

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* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *

=> d his

(FILE 'HOME' ENTERED AT 14:11:35 ON 11 FEB 2004)

FILE 'STNGUIDE' ENTERED AT 14:12:55 ON 11 FEB 2004

FILE 'REGISTRY' ENTERED AT 14:19:23 ON 11 FEB 2004

L1	STRUCTURE UPLOADED
L2	50 S L1
L3	STRUCTURE UPLOADED
L4	1 S L3
L5	19 S L3 FULL

FILE 'CAPLUS' ENTERED AT 14:27:39 ON 11 FEB 2004

L6 235 S L5

FILE 'REGISTRY' ENTERED AT 14:28:57 ON 11 FEB 2004
L7 18 S L5 NOT 84-83-3

FILE 'CAPLUS' ENTERED AT 14:30:14 ON 11 FEB 2004
L8 27 S L7

FILE 'BEILSTEIN' ENTERED AT 14:45:37 ON 11 FEB 2004

=> s 15

L9 7 L5

=>

=> s 13 full

FULL SEARCH INITIATED 14:45:59 FILE 'BEILSTEIN'
FULL SCREEN SEARCH COMPLETED - 325 TO ITERATE

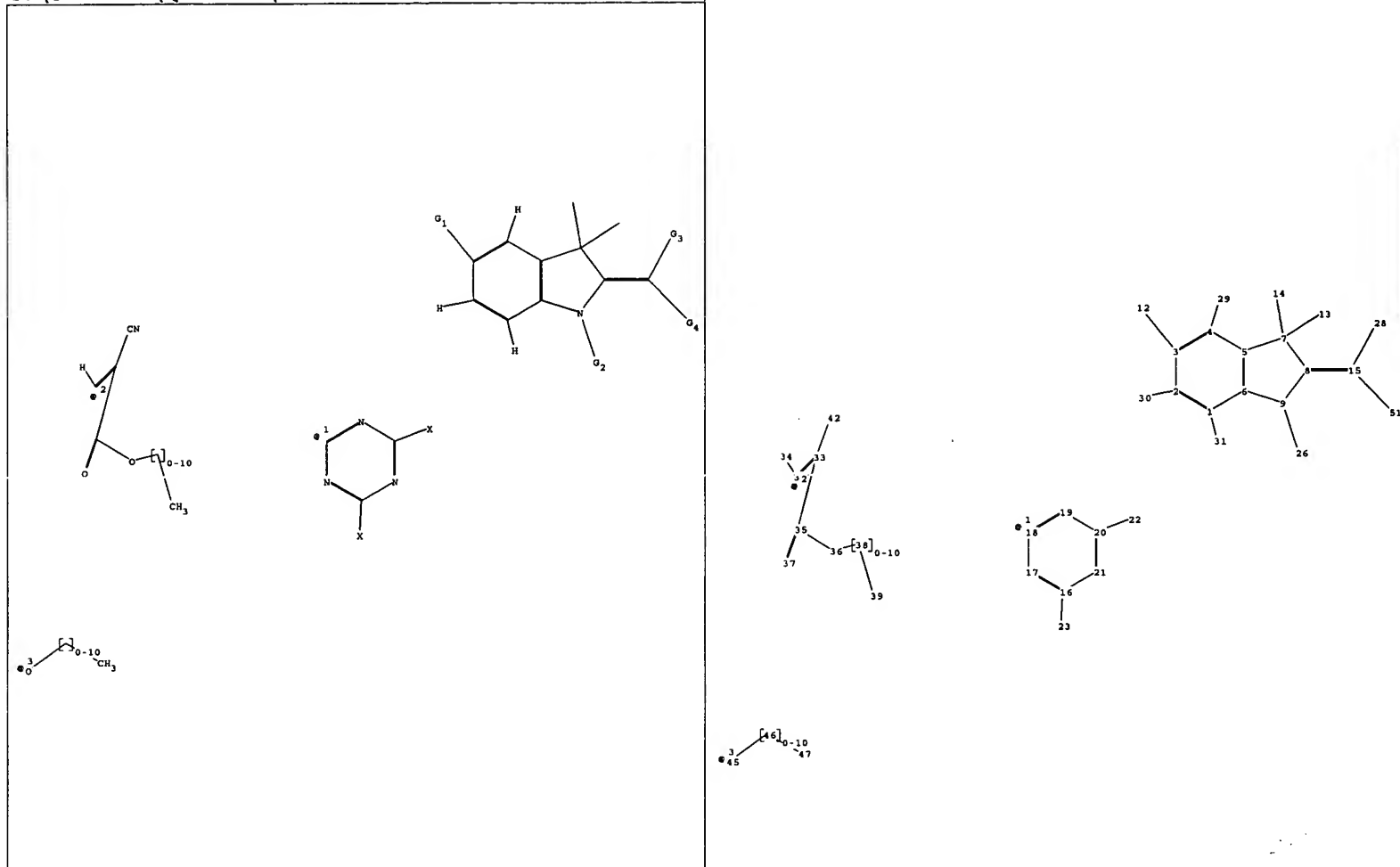
100.0% PROCESSED 325 ITERATIONS
SEARCH TIME: 00.00.15

7 ANSWERS

L10 7 SEA SSS FUL L3

=> s 19 not 110

L11 0 L9 NOT L10



chain nodes :

12 15 22 23 26 28 29 30 31 32 33 34 35 36 37 38 39 42 45 46 47 51

ring nodes :

1 2 3 4 5 6 7 8 9 16 17 18 19 20 21

ring/chain nodes :

13 14

chain bonds :

1-31 2-30 3-12 4-29 7-13 7-14 8-15 9-26 15-28 15-51 16-23 20-22 32-33 32-34
33-35 33-42 35-37 35-36 36-38 38-39 45-46 46-47

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 16-17 16-21 17-18 18-19 19-20 20-21

exact/norm bonds :

3-12 5-7 6-9 7-8 8-9 9-26 15-28 15-51 35-37 35-36 36-38 45-46

exact bonds :

1-31 2-30 4-29 7-13 7-14 8-15 16-23 20-22 32-33 32-34 33-35 33-42 38-39 46-47

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-21 17-18 18-19 19-20 20-21

G1:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO,H,X

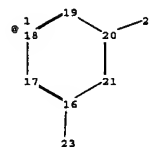
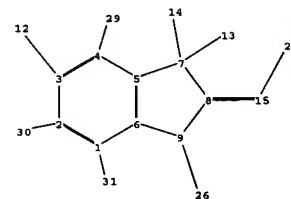
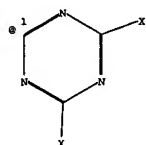
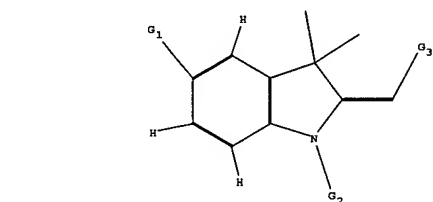
G2:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu, [*1]

G3:CHO,H

G4:CHO, [*2], [*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 12:CLASS 13:CLASS
14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:CLASS
23:CLASS 26:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS
35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 42:CLASS 45:CLASS 46:CLASS 47:CLASS
51:CLASS



```

chain nodes :
  12 15 22 23 26 28 29 30 31
ring nodes :
  1 2 3 4 5 6 7 8 9 16 17 18 19 20 21
ring/chain nodes :
  13 14
chain bonds :
  1-31 2-30 3-12 4-29 7-13 7-14 8-15 9-26 15-28 16-23 20-22
ring bonds :
  1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 16-17 16-21 17-18 18-19 19-20 20-21
exact/norm bonds :
  3-12 5-7 6-9 7-8 8-9 9-26 15-28
exact bonds :
  1-31 2-30 4-29 7-13 7-14 8-15 16-23 20-22
normalized bonds :
  1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-21 17-18 18-19 19-20 20-21

```

G1:CH₃,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO,H,X

G2:CH₃,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu, [*1]

G3:CHO,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 12:CLASS 13:CLASS
 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:CLASS
 23:CLASS 26:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS